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"THE TIMES" OF THE TRANSPORT WORLD

BRITISH  
TRANSPORT  
DURING  
1957

See Page 3

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Confidence

ALTHOUGH an important component of the British Transport Commission's undertaking, the railways, had a working deficit of £27 million in 1957, £10 million more than in 1956, the Commission in its report for 1957 (made public on Friday of this week) does not qualify the confidence previously expressed as to the commercial future of British Railways and indeed of its whole undertaking. Other activities, including British Road Services, the bus undertakings, London Transport, ships, docks, inland waterways, hotels, catering services and property, produced a working surplus of over £23 million, so that this confidence is well supported. Under the arrangements outlined in the Government White Paper of October, 1956, the B.T.C. plan for bringing its accounts into balance in 1961-62, a plan which allows time for railway modernisation and the new charges system to yield increased revenue, produced results not far short of expectations. The fact remains that despite the windfall of petrol rationing £63.5 million has been added to the loan this year and of the £250 million allocated by the Government £118 million has been used, leaving only £132 million for 1959-62. Grounds for optimism are the progress, often ahead of programme, made in the re-equipment and rehabilitation of the railways, which gave higher standards of speed, reliability and convenience for freight and passenger service for the year under review and in many directions brought in substantially improved returns. Freight has nonetheless declined, but this is attributable in part to general economic conditions and depressing effects of the credit squeeze on trade. Obviously, also, the C-licensed road vehicle is also cutting more extensively into the diminishing volume of freight to be moved, as is mentioned in the brief review of B.T.C. activities published on page 3.

Breaking New Ground

IT is emphasised in the report that the Commission is breaking new ground in public transport (how did that foreign word "transportation" get into this paragraph of the report?). Modernisation is not merely placing large orders for new equipment; it involves solving technical problems and often we at home are ahead of the rest of the world in doing this. Faster freight services with reduced wagon stocks, for example, call for new methods of control and recording for which electronic data-processing systems are being studied. Intensive operation of electric and diesel locomotives with small wheels running at higher speeds gives rise to new problems in track design. Original research has been called for in fitting continuous brakes to freight wagon stock and a fully automatic coupler now appears necessary. Carriage bogie design has also called for development. In all this practice in other countries has been closely studied. It has to be remembered that our intensive services sometimes preclude adoption of methods successful on less densely occupied systems. This railway research is matched by efforts in the road transport sections of the B.T.C., where the Lodekka and RM type buses are, for their respective tasks, advanced vehicles which should be current for years to come. The British Road Services fleet, no less than ships, hotels and other installations, is a justifiable source of pride to the B.T.C. Reference is also made in the report, to which we propose to devote further attention later, to the part played by the Commission in fostering the Channel Tunnel investigation, a fine example of forward thinking.

Meagre Information

PUBLICATION of the Summary of Annual Reports of the Traffic Commissioners, 1956-57 (H.M. Stationery Office, price 3s. 6d.) unfortunately continues the history of a postwar economy which has gone wrong. Admittedly the reports prior to the war tended to duplicate information to a certain extent, but they did provide an overall picture of developments in any particular area and we feel that the limit has

surely been reached when, under the heading "Licensing of Public Service Vehicles," the summary for the South-Eastern Traffic Area consists of one sentence—"More vehicles were specially constructed or converted for one-man operation." In fact, most of the commissioners refer to this trend and several refer to the continued demand for excursions and tours and, in certain cases, express services. Almost all place on record references to diminished traffic on stage services and attribute it variously to television and the increasing use of private cars. The tabular matter included follows its customary form and shows that there were 74,177 public

CURRENT TOPICS

Air Traffic Control

THE announcement in the House of Commons by the Minister of Transport and Civil Aviation that a substantial scheme had been started for the improvement and re-equipment of the British air traffic control system will be generally welcomed. The limitations of the present system are likely to become more apparent as the number of flights increases and the cruising speed of aircraft continues to rise; thus the time is fast approaching when maintenance of safety in the air must involve more and more delays unless a new method of handling

LEADING FEATURES IN THIS ISSUE

Portrait	PAGE		PAGE
Mr. Reay Geddes, O.B.E.	9	Smithfield Strike Inquiry: Causes Investigated	14
Special Articles		New B.M.M.O. Bus Station and Garage	14
A Free Hand for C.I.E.	2	Fuel Efficiency Exhibition	16
British Transport in 1957: B.T.C. Report and Accounts: Confidence in the Future	3	Modern Airways Section	
New Canal Port for Leeds: Modernising the Aire and Calder	5	New High-Intensity Equipment at Southend Airport	11
British Radar Speedometer can Select Individual Vehicles	6	Britannia Maintenance Docks at London Airport	11
Mechanisation of Coal Handling: Ford Tractor Demonstration	7	Regular Features	
New Marshalling Yard at Margam: Railway Side of Welsh Steel Transport	10	Book Notices	6
Mobile B.P. Display Vehicle	12	Commercial Aviation	9
Hand Trucks by Conveyancer: Skid-truk, Drumtruk and Handtruk	12	Financial Results	16
Reorganised Boiler Shop: Progressive Flow at Crewe Works	13	Forthcoming Events	2
Cape Asbestos Results	13	Important Contracts	16
London Bus Strike: Settlement Proposals	13	In Parliament	9
		Letters to the Editor	6
		Lorry, Bus and Coach News	4
		News from all Quarters	8
		Publications Received	6
		Shipping and Shipbuilding	16
		Social and Personal	15
		Tenders Invited	16

service vehicle licences current at March 31, 1957. This date was, of course, within the period of the Suez fuel restrictions. Under the relevant Acts there were in all 993 prosecutions, of which 894 resulted in convictions. It is somewhat surprising that, in this day and age, 56 of these should have been for using a stage or express carriage without a road service licence or backing and that 52 should have been for use of a vehicle without a p.s.v. licence.

An Inland Port for Leeds

HISTORY records that the Act of Parliament which first established the Aire and Calder Rivers as a commercial enterprise was passed in 1698. Since then this important waterway has weathered many vicissitudes including the coming of the railway in the early nineteenth century and the impact of road transport in the twentieth. Under the British Transport Commission modernisation plan it is again being given a fair chance to prove that a modern waterway is a highly competitive form of transport, and that for certain bulk traffics it can be both quicker and cheaper than road or rail. That the B.T.C. Inland Waterways Division has every confidence in the future of the Aire and Calder is evidenced in Leeds by the new £250,000 Knotrop terminal depot, which was officially opened to traffic on June 17 by the Lord Mayor of that city, Alderman Mrs. Mary Pearce. In his introductory speech, Mr. Trevor H. Thornton, North Eastern divisional manager of British Waterways, expressed the hope that Knotrop would bring real commercial benefit to Leeds. To judge by the facilities which are now offered that hope is a realistic one—and it is now up to industry to reciprocate by making the best possible use of the services which Knotrop can offer.

is evolved. Under conventional methods today the air traffic controller gets his information by radio from the pilots themselves. This system works quite satisfactorily if there is plenty of air space available and if the number of radio messages to and fro remains manageable. In the United Kingdom, however, there is a limited amount of air space which can be reserved for airways traffic and it is necessary to lessen rather than increase the amount of radio communication between air and ground which already takes up so much of the pilots' and controllers' time. As recorded on page 9, four new long-range radar stations are to be built so that practically the whole of the airways system will be scanned. The radar information will be sent automatically from these stations to the three joint civil and military air traffic control centres. At first the radar information will appear in the centres on the familiar plan position indicators, but these will be progressively replaced by new types of display. These will present a much clearer picture; all clutter and unwanted echoes will be removed and extra information such as individual aircraft identity and height added. The radar information will, in fact, be fed into an electronic store which will sort it and automatically supply each controller with the up-to-the-minute information which he needs.

Lessons of the Strikes

SO the London strikes are over. That of the busmen was official; that of the dockers unofficial. Both were needless and unjustified; what is more, they caused serious loss, not only to the participants but to the public at large. In their tendency to cease work on the slightest provocation, and in face of the advice of their chosen leaders, the dockers seem incorrigible. Old and bitter

memories die hard and are handed down to the next generation. Otherwise obviously improved pay and conditions would by now have encouraged a more reasonable and conciliatory attitude on the part of dock workers. A quixotic desire to support other workers' disputes has bedevilled the recent stoppage and the phasing of the resumption of work has been a ticklish task. Perhaps the remedy for their chip-on-the-shoulder lies in a closer identity between dockers and their employers, but the problem has so far baffled the keenest brains on committee and commission. In the meantime some regular shipping lines are considering forsaking the Port of London for ever for ports with better records. The bus workers, on the other hand, have a relatively good record of freedom from industrial turmoil, reflected in their conduct during the recent strike. London Transport is an exemplary employer and could do no other than uphold the finding of the Industrial Court. Perhaps the latter was shortsighted in awarding nothing at all to some of the prospective beneficiaries. At least one can agree that if parties to industrial disputes are to accept the award of the arbitrator—and that is only reasonable in an ordered society—then the arbitrator should explain the reasons for his award.

Public the Loser

AS to official strikes, we find it difficult to accept the assertion of even so high an authority as the Prime Minister or Minister of Labour that a secret ballot would fulfil no useful purpose. The tragedy to the operator is that in London where bus riding has been diminishing for some years, over the last two months many people have found they can do without buses. Cutting down of services was in progress before the strike and even more drastic pruning appears now inevitable, but perhaps it was a tactical error to post those notices in the garages. Beyond their withdrawal the union gained little more than was offered them weeks ago and nothing more than would have been justified by now through changed circumstances, although many feel the concessions to Country men override the arbitration award. The terms of agreement are given on another page. Quite evidently the London public is the final loser, either by higher fares or, if the Government frowns upon that expedient, by reduced and less attractive facilities. However, in two ways the bus strike has been useful: it has demonstrated a high sense of responsibility on the part of the T.U.C. and it should have left no doubt in the minds of the strikers that wages have to be earned.

London Aftermath

IT is evident that the Government has been quick to insist that the London bus business—no matter what Sir John Elliot feels compelled to offer Country bus men—is to be conducted at its present fare levels. To the customer, indeed, even the raising of substandard fares that is within London Transport's competency without reference to the Transport Tribunal is still a rise in fares. Owing to the temperament of the British public and its excellent supply of alternative means of private mobility there is no need in London for Barcelona boycott procedure. Travellers are even more coy since the strike than they were before. London Transport, denied revenue from fare increases, will be involved in service reorganisation in a big way, to implement which union representatives have promised their co-operation. There has been a good deal of loose newspaper talk about this, inspired by private motoring interests and the exponents of the exploded "wheel plan." In our experience London traffic was certainly not faster during the bus strike, especially during the peak periods, where 55-min. journeys by car dragged out to 70 min. and a journey we regularly make in 100 min. expanded to 120 and even 130 min. The bus can fulfil a useful function in our great cities which cannot be usurped by the car; the U.S. offers daily proof that attempts at mass transport by car, even with the most lavish expenditure on city street improvements, can fail dismally.





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*The Editor is prepared to consider contributions offered for publication in MODERN TRANSPORT, but intending contributors should first study the length and style of articles appearing in the paper and satisfy themselves that the topic with which they propose to deal is relevant to editorial requirements. In controversial subjects relating to all aspects of transport and traffic this newspaper offers a platform for independent comment and debate, its object being to encourage the provision of all forms of transport in the best interests of the community.*

We desire to call the attention of our readers to the fact that Russell Court, 3-16 Woburn Place, London, W.C.1, is our sole London address, and that no connection exists between this newspaper and any other publications bearing somewhat similar titles.

### A Free Hand for C.I.E.

DURING the seven years to March 31, 1957, Coras Iompair Eireann lost £10,500,000, a serious result for an undertaking which operates 1,918 miles of railway, some 1,100 buses and more than 1,000 road freight vehicles. In May of the same year a committee of inquiry under the chairmanship of Dr. J. P. Beddy, chairman of the Transport Tribunal, recommended measures for restoring this State concern to financial equilibrium. When reviewing its report (MODERN TRANSPORT, May 25, 1957) we regretted that its terms of reference did not enable the committee "to come out flatly against any form of Ministerial interference with the affairs of C.I.E." The Republic of Ireland Transport Bill, to which we briefly referred in our issue of May 31 last and which is designed to implement, with modifications, the committee's recommendations, does in fact bestow considerable freedom on C.I.E. So exceptional and comprehensive are its main provisions as to justify a more detailed review of the measure, which has now passed through its final stages in the Dail. In introducing the Bill on May 8 Mr. Sean Lemass, Minister for Industry and Commerce, intimated that whilst its principal object was to implement the committee's recommendations it excluded those which drew the pattern of the future system by specifically reducing the railway from its present 1,918 route-miles to approximately 850. Instead it left to C.I.E., which had access to all relevant factors, the responsibility for closing down any line or station for which there was clearly no future. This the C.I.E. will be able to do without reference, as now, to the Transport Tribunal, which is to be abolished, and subject only to the obligation of being satisfied after a reasonable period that there is no prospect of economical operation. The board, concluded Mr. Lemass, must be encouraged to minimise its losses and finally to eliminate them.

### Full Autonomy

ENCOURAGEMENT is in two forms—administrative and financial—and the losses must be eliminated by March 31, 1964, five years from the Act's implementation. To provide "reasonable" transport services the company is to have full autonomy in such matters as the provision of services, the closure of lines and stations and the fixing of charges. When closing a line the undertaking need not provide substitute road services, in which case private interests may apply to the Minister for road passenger and/or merchandise licences. ("There would be no point," remarked Mr. Lemass, "in permitting the C.I.E. to close a line and at the same time oblige it to substitute another service which would involve it in a loss also"—not much here to attract the private operator!) Moreover, the company need no longer maintain in navigable condition disused canals, but it will still be responsible for maintaining them for the purpose of drainage and flood prevention; provision of canal services will continue to be at its discretion. All common carrier and other obligations which restrict the commercial adaptability of the undertaking are to be removed. C.I.E. will no longer be precluded from charging preferential rates for any particular traffic and will be free to impose such charges and attach such terms

## MODERN TRANSPORT

JUNE 28, 1958

and conditions if so specified in writing as it may think fit. It may enter into "agreed charges" arrangements and may refuse any traffic. To assist reorganisation and rehabilitation, there are sweeping financial provisions which will relieve the board of many of its present responsibilities and provide a useful subsidy during the transition stage.

### Generous Financial Provisions

THUS the 3 per cent Transport Stock 1955-60, amounting to nearly £10 million, will be regarded as a Government loan; the stock will be eliminated from the C.I.E. balance sheet and all liabilities attaching to it, including the annual interest charge of £296,672, will become the direct responsibility of the Minister of Finance. This arrangement, together with relief from liability to repay to the Exchequer £1.8 million in respect of advances made in 1956-57 towards capital expenditure and for redemption of guaranteed bank overdraft, is equivalent to a total write-off of £11.7 million in the capital liability of C.I.E. and a reduction of £400,344 in the annual interest charges. Provision is also made for the writing-off of advances totalling £4.8 million made to C.I.E. from the Exchequer up to March 31, 1958, to meet Transport Stock interest, which will relieve the board of an additional annual interest charge of £231,491; total relief provided by the Bill in the interest charges payable by C.I.E. will therefore amount to £631,835 per annum. Additionally, direct financial assistance will be granted by the Government during the period of reorganisation. This will take the form of non-repayable grants amounting to a total of £5 million for the five years 1959-60 to 1963-64 inclusive. From these sums the undertaking will be expected to meet all revenue expenditure not covered by receipts, including payment of interest on Transport Stock.

### Opposition from Hauliers

COMPENSATION is payable under the Bill to staff who suffer worsening of their conditions or loss of employment. This, however, will not as hitherto be the responsibility of the board but will be a charge on the Exchequer. Maintenance of road bridges over railways will become the responsibility of the highway authorities, and other provisions will enable C.I.E. to introduce modern methods (as is now possible in this country) into the operation of level crossings and to dispose to local authorities or public utility undertakings the sites of abandoned railway lines. Regulations prohibiting the carrying-on of a passenger road service without a licence will not apply to C.I.E., but the company will not, without the Minister's consent, initiate or alter any passenger road service so as to compete with a licensed service. There has been strong opposition from independent road-carrying interests, on whose behalf amendments, aimed at relieving them from 25-year-old restrictions in favour of a modern and flexible system of road vehicle licensing, were unsuccessfully introduced in the Dail. Despite this and other opposition the Bill passed through its various stages with only minor alterations. Indeed, as if to heighten the indignation of professional hauliers, the Minister inserted a further clause designed to permit farmers to haul for reward by tractor-trailers. A separate Bill is to be introduced to settle the many details arising out of the impending termination of the 1953 agreement coincident with the dissolution of the Great Northern Railway Board. This measure will be parallel to the Northern Ireland Transport Bill, briefly described in our last issue, which recently received a first reading in the Northern Ireland Parliament.

### Forthcoming Events

- June 28.—Light Railway Transport League. Paper by Mr. J. H. Price, "The Dartford Hospital Tramways." At Fred Tallant Hall, Drummond Street, N.W.1. 3 p.m.
- June 30-July 4.—Institution of Naval Architects. Meeting in Paris.
- July 9.—Light Railway Transport League. Paper by R. K. Crees and J. R. Cook, "Transport in East Berlin." At Fred Tallant Hall, N.W.1. 7 p.m.
- July 19.—Permanent Way Institution. Visit to H.M. Dockyard, Chatham.
- July 20.—Railway and Canal Historical Society. Centenary visit to Netherpton Tunnel by "Lady Hatherton." 12.30 p.m., with bus connection from Birmingham.
- July 20.—Omnibus Society. Thames estuary tour, involving various forms of transport.
- July 26.—Light Railway Transport League. Paper by R. B. Parr, "The Wemyss Tramways." At Fred Tallant Hall, N.W.1. 3 p.m.
- September 1-7.—Society of British Aircraft Constructors. Flying display and exhibition. At Farnborough. (Public days September 5, 6 and 7.)
- September 8-12.—Municipal Passenger Transport Association. Annual conference. At Blackpool.
- September 26-October 4.—Commercial Motor Transport Exhibition. At Earls Court.
- September 28-October 7.—International Railway Congress. At Madrid.
- September 29.—Passenger Vehicle Operators Association. Annual dinner-dance. At Grosvenor House, London.
- October 13-15.—Road Haulage Association. Annual conference. At Torquay.
- November 3-16.—International Motor Show. At Turin.

MODERN TRANSPORT has an arrangement with Reuter's Trade Service whereby publication is made in this newspaper of all essential news from all parts of the world concerning traffic and transport by rail, road, sea and air and allied interests.



# BRITISH TRANSPORT IN 1957

## B.T.C. Report and Accounts

### CONFIDENCE IN THE FUTURE

**Y**ESTERDAY (June 27) the annual report and accounts of the British Transport Commission for 1957 were published by H.M. Stationery Office.\* In addition a short version, *British Transport in 1957*, is published by the B.T.C.† It is a record of improved physical assets and improved organisation, somewhat clouded by the losses incurred on railway operation, although those are covered by the special arrangement made with the Government during the period in which modernisation is fructifying.

#### Main Features of 1957

In the Government's White Paper of October, 1956, the Commission set out a plan to bring its accounts into balance by 1961-62. This would allow time for railway modernisation and the new freight charges scheme to yield increased revenue. In this context, the report opens by saying that "the results of the year 1957 were not far short of expectations. The working deficit on British Railways was £27.1 million" (£10.6 million more than that incurred in 1956), "whereas there was a working surplus of £23.4 million on the Commission's other activities, taken together and including British Road Services, Provincial and Scottish Buses, London Transport, Ships, Inland Waterways, Docks, Hotels and Catering Services and Property. After charging interest, etc., the sum which the Commission is authorised by Parliament to borrow in respect of the railway deficit less the surplus of other activities amounts to £63.5 million." This amount exceeds that expected when the financial plan embodied in the Transport (Railway Finance) Act, 1957, was made, but not greatly.

It may be noted that for the two years 1956 and 1957, the sum which the Commission may borrow in respect of deficits amounts to £118 million. The sum authorised for this purpose in respect of the years 1956 to 1962 is a maximum of £250 million and there is thus a balance remaining of £132 million.

#### Competition and Confidence

In view of the competition which has intensified in all branches of public transport, the Commission considers that the year's working results are as good as could be reasonably expected. It sees the need to accelerate the pace of modernisation and is taking steps to secure further economies. It does not qualify the confidence it has expressed in previous reports in the commercial future of British Railways and indeed of its whole undertaking.

When the year 1957 opened, the traffic receipts of British Railways and of London Transport and the Tilling and Scottish Bus Groups were running well above expectations as a consequence of the rationing of fuel for road vehicles. Indeed, for a short time the Commission was within measurable distance of balancing its accounts in total. But these additional traffics started to fall as the restrictions were eased and the ration ultimately abolished, on April 1 for diesel oil and May 14 for petrol. Moreover, during the early months of the year the wages of most of the Commission's employees were raised by 5 per cent, at an estimated cost of nearly £20 million a year, and in July coal prices were increased at a cost to the Commission of £5 million a year. The main increases in fares and charges designed to meet the higher wage rates and coal prices were deferred until August and September and this meant broadly that the receipts from the extra traffics during fuel rationing were absorbed by these higher costs up to the time when fares and charges were raised.

Diagrams are reproduced which show how moderate have been the increases in charges on the Commission's services since before the war. The Commission has done more than most industries and services to keep prices down and it is not surprising that this has "affected its general profitability in the period."

#### Railways and Road Competition

The report records encouraging progress with the re-equipment and reorganisation of British Railways; in some of its most important elements, the modernisation plan was well ahead of the timetable envisaged in 1955. In many directions, passenger and freight services on the railways reached higher standards of speed, reliability and convenience in 1957. These improvements followed the introduction of new rolling stock, the lifting of some speed restrictions after extensive track renewals, fresh measures to improve through transits for freight, and the continuing efforts and increased sense of urgency on the part of the traffic staffs in the face of competition. The decline in railway freight traffics, in spite of better services offered and the moderate level of rail charges in relation to prices generally, can be ascribed, in part, so far as the last quarter of the year is concerned, to general economic conditions in the country.

"But it must be recognised that there have been increasing diversions to C-licensed road transport vehicles. The number of these vehicles in operation passed the one million mark for the first time towards the end of 1957, representing an increase to about three times the prewar figure. This continued increase in carrying capacity was not accompanied by any increase in the total volume of goods to be carried. On the other hand, passenger carryings by rail continued to improve, giving evidence of the attraction of modernised and faster services. In spite of the steady growth of private transport, British Railways was carrying more passengers than at any time since it came under the Commission."

#### Investment

In connection with road-rail competition, it is sometimes claimed that an undue proportion of the national investment is being devoted to the improvement of the railways, in relation to that earmarked for the roads. The Commission, as operator of buses and lorries on a large scale, welcomes road improvement schemes. It does not

wish to see railway traffic protected by bad roads, but it feels it fair to emphasise that railway investment is still only one-fifth of the investment in road transport, and that the current level of capital expenditure on railway track is much less than that on new and improved roads. In shares of capital investment the railways get 16 per cent, of which 14 per cent is vehicles, plant and machinery and only 2 per cent track. Road transport has received 84 per cent; 6 per cent of this is expended on highways; 43 per cent on business road vehicles and buildings; and 35 per cent on motor cars and motor cycles on personal account.

#### Reduction of Working Expenses

The first objective of the Commission in 1958 is to improve the financial position of its undertaking and particularly of British Railways. The prospects for increasing revenues at this time are not bright, though every effort to that end will be made. Thus the major effort must be on reduction of working expenses. The Commission also intends to press urgently ahead with its plans for the modernisation of British Railways, confident that this is the key to the future prosperity of the industry, and the means for providing the nation with the railway services which it requires.

In 1956 recruitment of staff in many areas in the country began to ease and by the end of 1957 it no longer gave rise to serious difficulty in any part of the Commission's undertaking. After filling most vacant posts, but not all those which existed in a few industrial centres, the numbers employed in some railway regions, in British Road Services, in the bus groups taken as a whole, in London Transport and in the Commission's docks were lower than a year earlier. There is room for further economy in manpower on British Railways, and steps are being taken to secure it.

The Commission is glad to record that its confidence in the general willingness of the railway staff to co-operate over the making of new arrangements for greater efficiency of working was fully justified by the progress made in 1957 with (for example) the further extension of work study and incentive bonus schemes, and in the agreement reached with the trade unions for the manning of diesel and electric locomotives. Reference is also made to progress made towards greater efficiency and productivity through the British Railways Productivity Council and through the joint consultative machinery. During the year, a total expenditure of about £2,700,000 was authorised for new and improved staff amenities on British Railways.

#### Road Activities

Although it also was exposed to at least as severe competition as in any year since its formation, British Road Services earned £1 million more in net receipts (£2.8 million) compared with 1956. In a situation where the total road carrying resources in the country offered more capacity than could be filled by the goods available for haulage, B.R.S. achieved this result by offering first-class service, it is stated.

In common with all public road passenger services, including London Transport, the bus companies which the Commission control or in which they have an interest, suffered a further decline in traffic. In the circumstances, the wholly owned provincial (Tilling) and Scottish bus groups did well to earn £5 million in net receipts (£0.3 million less than in 1956). The Commission now styles its Tilling group of buses the "Provincial" group in its report; this is not to be confused with the erstwhile Provincial Traction group which still is represented by the Gosport and Farnham undertakings.

Despite the windfall of traffic during petrol rationing, the number of passengers carried on London Transport services continued to fall. In great measure this was a reflection of more private motoring (a factor which also continued to affect the other bus groups) and more television. London Transport net receipts for road services were £1.2 million higher at £3.8 million, and from rail services, £0.1 million lower at £1.9 million.

#### On the Water

The Commission's shipping services did rather better in 1957 than in 1956, the net receipts of £1.9 million representing an improvement of £0.1 million. Passenger traffic to and from the Continent and Northern Ireland and on the estuarial and lake services was buoyant, but there is much leeway to be made up on the Channel Islands services if the new ships on order are to pay their way. Freight ferry services, carrying road or rail vehicles and containers, have continued to develop, especially those with the Continent.

The Commission again spent large sums on new equipment and on maintenance in the Docks and Inland Waterways divisions. Despite further switches in imports and exports, which are, of course, outside the Commission's control, the main groups of docks showed a surplus, which, in some cases, was small in relation to turnover. Where increased tonnage was handled at economic rates, such as occurred with iron ore to the North East coast, net receipts quickly improved.

Where rates were statutorily held at a very low level, as at the Hull, Grimsby and Fleetwood fish docks, heavy losses were inevitable. Without waiting for the outcome of the Bowes inquiry, the Inland Waterways Division continued to develop the Group I canals and to raise the standard of maintenance of those in Group II, and generally to promote both commercial and pleasure traffic. It was not expected that the cost of these improvements could quickly be recouped out of traffic receipts.

#### Hotels and Catering

Thanks to the ambitious modernising of the Commission's hotels and railway refreshment rooms in recent years, their results in 1957 were the best since nationalisation. Although it has not yet been possible to replace many outdated restaurant cars, they did increased business in 1957.

Gross receipts in commercial advertising at £3.1 million were £0.1 million less than in 1956, the decline being attributed to increasing competition, especially from commercial television, the international situation and petrol rationing in the early part of the year, and the intensification of credit restrictions as the year went on. Working expenses at £1.2 million were practically unchanged and net receipts at £1.9 million were therefore £0.1 million less than in 1956.

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petrol or diesel powered

**FORWARD CONTROL**  
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- Robust four-speed synchromesh gearbox.
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Stewarts & Lloyds Limited state that the Brush-Traction Diesel-Electric

Locomotives supplied over twelve months ago for shunting services in the integrated Iron and Steel Works at Corby are giving very satisfactory service.

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Diesel-Electric Shunting  
Locomotive of 400 H.P. made  
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BRUSH ELECTRICAL ENGINEERING CO. LTD., LOUGHBOROUGH, ENGLAND

A Member of the Hawker Siddley Group

\*Vol. I—Report—HC 215-I, Price 6s. net and Vol. II—Accounts—HC 215-II, Price 15s. net. From H.M. Stationery Office.  
†Obtainable from Chief Publicity Officer, B.T.C., 222 Marylebone Road, N.W.1., Price 2s.



## LORRY—BUS—COACH

## Birmingham Bus Route Investigation

**ACCELERATION** by one mile per hour of Birmingham City Transport buses could save the undertaking £200,000 a year, states the report of a Transport Committee inquiry team. They agree that the big drawback to a speed-up is the city traffic congestion. To test the economic possibilities, the proposals name route 14 (City—Tile Cross Estate) as the most suitable for a semi-express service. The report rejects the idea of season tickets and suggests further examination of a "pay at the bus stop" fares system.

The sub-committee found that few improvements can be made to save money and spare most of the 14 routes listed which lose more than 1d. a mile. They say the withdrawal of these would cause hardship, and only one route—the peak hour 46 between Station Street and Hall Green—should be withdrawn completely. The 70-page report took 11 months to prepare. Conservative members of the Transport Committee refused to sit on the inquiry after a plea for an independent investigation was rejected. Last year the buses showed a profit of £87,000 compared with a loss of £124,000.

## Contract Bus Plea Fails

A FINE of £5 has been imposed by the Dumfries Sheriff Court on Passenger Transport Facilities, Limited, Manchester, for causing or permitting a bus to be used as a contract carriage without a public service vehicle licence (MODERN TRANSPORT, June 14). In evidence it was submitted that a firm of consulting engineers paid a large sum daily for the hire of the bus and that, while the user, they did not operate for hire or reward, as passengers paid nothing. Therefore a p.s.v. licence was unnecessary.

## Licences Threatened Over Wage Rates

THE Northern area Traffic Commissioners were to hold an inquiry today (Friday) at Newcastle upon Tyne into complaints by the Transport and General Workers Union that the Trimdon Motor Services, Limited, Co. Durham, is not paying proper rates to its conductresses. The Commissioners served notice on the company to show cause why its road service licences should not be revoked or suspended. The union attitude is that the company should pay wages to conductresses in accordance with a decision of the Industrial Disputes Tribunal.

## New Sheffield Garage

IN the year ended March 31, 1958, Sheffield City Transport carried 254,216,759 passengers, a reduction of over 5 million on the previous year, but there was a surplus of £24,809 compared with £19,992. A new bus garage in Greenland Road, Darnall, was officially opened by the Lord Mayor of Sheffield, Alderman J. W. Holland, on June 20. He was deputising for Mr. Frank Cousins, general secretary of the Transport and General Workers Union, who was detained in London by the bus strike negotiations. It has covered accommodation for 172 buses, with workshops, administrative quarters and canteens and there is outside accom-

modation for a further 100 buses. The main garage covers 14,712 square yards. There are three parking bays, 98 ft. by 308 ft., and a workshop bay with 17 pits. At a luncheon afterwards, Councillor Sidney Dyson, chairman of the transport committee, said he would be very happy indeed to be the first chairman of a transport undertaking in the country to operate a five-day week for the road staff. With co-operation he could see no reason why it could not be brought to reality.

## Push-Chairs on Free Loan

WITH the object of attracting more traffic on its rural bus services, the Maidstone and District Motor Services, Limited, is to introduce an experimental push-chair loan scheme at Maidstone

a letter to the objectors, General Sir Roy Bucher, chairman of the committee, has stated that after a most detailed examination of the circumstances the committee did not feel justified in supporting payment. Bus services involving this degree of subsidy could not be regarded as reasonable, nor could they be justified.

## S.A.R. Road Services Opposed

TEN organisations appeared before the Local Road Transportation Board in Cape Town last month to oppose an application by South African Railways for the extension of its ancillary road transport services in the Western Cape Province. The railways asked for permission to use additional vehicles to carry goods at rail tariffs initially offered for conveyance by rail and which the railways decided to convey by road because of congestion of traffic and to release rail trucks. The areas for which the authority was sought were largely those in which industrialists had been granted exemption entitling them to convey their own goods by road if they wished. The grant of the application would place them in a better posi-



En route from Chippenham to Warrington, this 75-ton excavator is hauled by a Foden FG/80 tractor powered by a Gardner 8LW 150-b.h.p. diesel unit

to ease travel for parents with young children who, it is hoped, will thereby be encouraged to make more frequent trips into town. From July 1 passengers who travel into Maidstone with their young children on the one-man buses which now serve the sparsely populated rural areas will be able to obtain push-chairs on loan free of charge or deposit from either bus station on production of their journey tickets. A push-chair can even be reserved by postcard. It is felt that this scheme, aimed at people who are, perhaps, more tied by domestic circumstances than others, will encourage travel on the very lightly loaded rural services.

## Yorkshire Bus Subsidy Issue Decided

SEQUEL to a six months' controversy, the Yorkshire area Transport Users' Consultative Committee is recommending the British Transport Commission to withdraw its subsidy in respect of the Wilsden—Cullingworth and Clayton circular bus service, near Bradford, as from October 1. In

tion because they would have the choice between their own facilities and those of the railways.

For the Cape Town Chamber of Commerce, it was submitted that the basic concept of the S.A.R. motor transport service was that it should be a feeder service to railway train services, but the railways were constantly extending the scope of its road transport. The chamber believed this to be contrary to the spirit of legislation which envisaged fair and equal control of all road transport. A representative of the Cape Motor Transport Owners' Association alleged that many vehicles authorised by the board were idle. They represented millions of pounds worth of investment by private enterprise and the livelihood of thousands of employees.

## Decision in Hudsons' Bus Fares Case

IN a reserved decision regarding their proposals that Hudsons Bus Company, of Horncastle, should come into line with Lincolnshire Road Car

Co., Limited, fares in respect of three Lincoln—Horncastle and Lincoln—Skegness bus routes, the East Midlands area Traffic Commissioners say that they have no doubt that Lincolnshire Road Car has in fact lost passengers to Hudsons. They take the view that, for the purpose of comparing Hudsons' operating costs with the costs of Lincolnshire, it is proper to take into account a sum equivalent to the three working partners' wages or salaries.

Lincolnshire claimed that Hudsons' accounts showed nothing for this item. The Commissioners are also far from satisfied that the fares charged on Hudsons' stage services are, by themselves, at an economic level. A large part of the business consists of contract work and private hire and it appears that this side is mainly responsible for such profits as the undertaking may show. Where, however, Hudsons' services are not competitive with the services of the Lincolnshire Road Car the Commissioners are allowing Hudsons to retain its present fares.

On the sections of route: (a) Horncastle to Skegness, (b) Lincoln to points east of Horncastle on the service to Skegness, and (c) Lincoln to Washington; where Lincolnshire Road Car operates very substantially the greater number of journeys, Hudsons' fares are to come into line with those of Lincolnshire. Elsewhere on the services, where Hudsons operates a substantial proportion of the journeys, Hudsons' fares will be something more than its present fares and something less than Lincolnshire fares.

## Leeds Passenger Drop is 5 Per Cent

DECREASE of almost 13 million (5.8 per cent) in the number of passengers carried by Leeds City Transport is recorded in the annual report to March 31 last of Mr. A. B. Rindlay, general manager of the transport department. The decline was partly attributable to the influenza epidemic of September and October, when an estimated 3,250,000 passengers were lost. Despite the reduced number of passengers, the department operated 352,730 more miles during the year carrying people to perimeter housing estates. Not one of the existing tram services even pay their working expenses, nor do 25 per cent of the bus routes. Nine per cent pay working expenses only, and the remaining 66 per cent pay their way. The surplus of £126,893 further reduced the department's accumulated deficit to £307,384.

## Bus and Coach Developments

Corona Coaches, Limited, applies for the Coggeshall—London service of S. Blackwell and Sons, Earls Colne, and to commence the service at Lavenham.

The summer issue of the Brighton, Hove and District timetable has a larger page size and is now 41 in. by 7 in. This enables the tables to be set out rather more lucidly and for the route map to be made more legible—a factor of importance in a complicated town system.

With the introduction of its summer timetable on June 29 Maidstone and District Motor Services, Limited, ceases to publish three area books and reverts to one comprehensive timetable. It has embellished the cover with a very pleasant four-colour picture of one of its one-man A.E.C. Reliances.

Devon General Omnibus and Touring Co., Limited, proposes a weekday service between Newton Abbot and Leigh Cross via Chudleigh Station, Trusham and Ashton, with garage workings to and from Exeter. This would cover the southern half of the Western Region Teign Valley branch and the fact that the application is for an experimental 12-month licence may indicate a new approach to railway replacement services.

With the restoration of London Transport bus services on June 21, the summer timetables of the Country Bus Department took effect. Changes included withdrawal of route 394D (Chesham—Kings Ash) but Swan Bottom will be served by diverting journeys on 394 (Chesham—Great Missenden). Services in Harlow and Crawley have been diverted to serve the new bus stations in those towns and a new limited-stop service (400) operates New Addington—Warrington Park Hospital.

## NEW BMC-MORRIS 7ton DIESEL

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Fleet Owners and drivers, too, will prize this new B.M.C.-Morris—Britain's lowest priced 7 ton diesel—with four-speed gearbox, servo braking, deep section chassis frame, big capacity platform and the most advanced cab design yet—all for LESS capital outlay.

\* Fleet Users: Have you sent for your copy of "Fleet Logic"—the Morris aid to sound budgeting? Write to the address below for your copy.

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# NEW CANAL PORT FOR LEEDS

Modernising the Aire and Calder

## KNOSTROP DEPOT OPENED

FEW cities have benefited so materially from an early growth of inland transport as Leeds. Only recently we had occasion to notice the bicentenary of the Act authorising the Middleton Colliery Railway, which, with the Aire and Calder Navigation Company, was a principal cause of the prodigious industrial expansion which took place here during the latter half of the 18th century and laid the foundation of the city's subsequent prosperity.

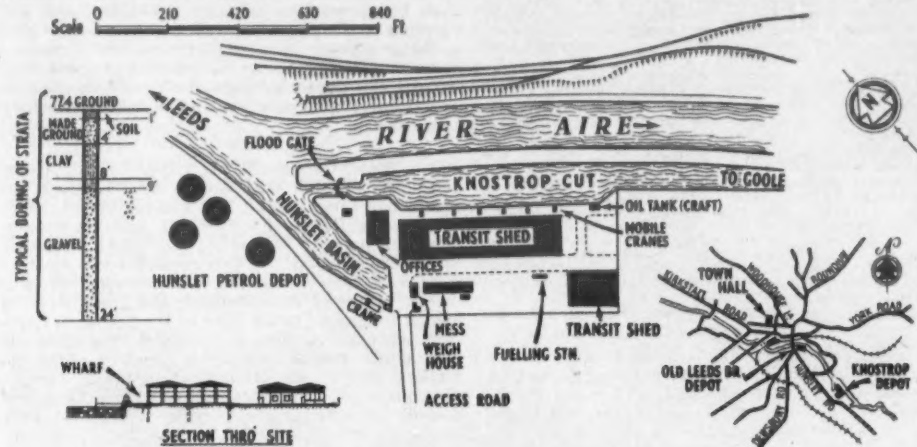
### Traffic

Today, some 260 years since Parliament sanctioned the first improvements to the Aire and Calder Rivers for commercial purposes, the waterway is still a useful facility, and carries over 2½ million tons of cargo each year between the Yorkshire West Riding area and the ports of the Humber. It extends from Goole to Leeds (where it meets the Leeds and Liverpool Canal) and Wakefield, where it joins the Calder and Hebble

to take large single-deck transit sheds, and leave space for possible future expansion. The Knostrop cut, an artificial by-pass of the River Aire to enable water traffic to avoid the weir, was eventually chosen because the 28-acre site was already owned by the B.T.C. Inland Waterways Division, and conveniently close to Hunslet Road about a mile downstream from Leeds Bridge.

### Berths and Sheds

To provide the necessary berthing accommodation, the cut had to be widened into a lay-by for a distance of 600 ft., to provide space sufficient for five 225-ton barges, or eight of the standard craft. The wharf is steel piled throughout, and capped with reinforced concrete. The piles, each 22½ ft. long, are secured by tie rods at 10 ft. 6 in. centres, to a second wall of sheet steel piling set into the ground 30 ft. back. The depth of water is 8 ft. at the wharf, and altogether the work involved the excavation of 15,000 cu. yd. of



Layout of new Knostrop depot of British Waterways

Navigation. In the years just prior to the 1914-18 war it carried up to 3½ million tons per annum, but thereafter followed the gradual and relentless decline which affected almost the whole of the inland waterways system until it was taken over by the British Transport Commission in 1948. Since then the main routes have shown a marked increase in traffic, and this trend should be further stimulated as the £5½ million development plan of 1955 gets under way.

The Aire and Calder Navigation is now part of the North Eastern division of British Waterways, and under the present plan a sum of £765,000 for

material. The entire area available for unloading measures 600 ft. by 30 ft., and is clear of any obstruction. Transfer is by 6-ton mobile cranes.

There are two transit sheds on the site. The largest, known as No. 1 shed, is located parallel with the wharf, and measures 480 ft. by 120 ft., and has a clear inside height of 25 ft. The smaller shed (No. 2) lies to the rear of No. 1 and measures 150 ft. by 100 ft., with a clear inside height of 22 ft. Both sheds are of reinforced concrete construction with asbestos cement roofing, granolithic finish flooring, and piled foundations. Together they total 76,000 cu. ft. of

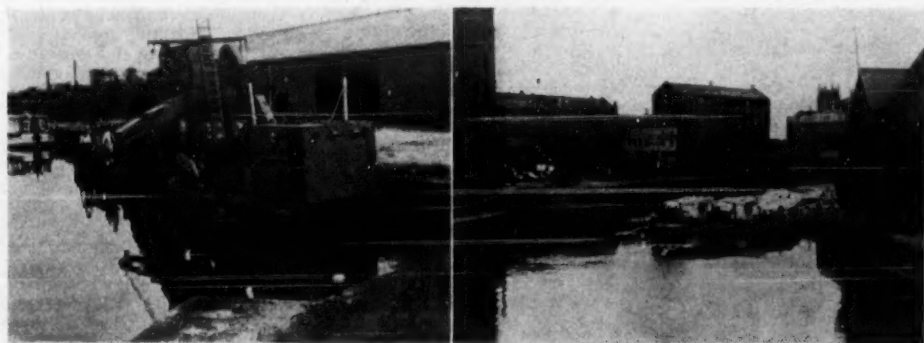


Transit shed and wharf at Knostrop

improvements has been allocated. Already in this division, new transit sheds and quays have been completed at Nottingham and new dry docking and workshop facilities built at Newark. At a cost of a quarter of a million pounds a weir has been constructed at Cromwell to improve navigation on the River Trent; new merchandise craft have been put into service, and five new diesel tugs will soon be working on the coal traffic. A new lock is in course of construction near Doncaster to enable the passage of larger craft, and many miles of bank protection with steel and concrete piling have been undertaken, besides the

storage space, of which some 20,000 sq. ft. has already been booked by one concern. Immediately adjoining the depot, which is linked by road with Leeds and the West Riding conurbation, is a developable area of about 18 acres.

To facilitate collection and delivery within a radius of 25 miles Knostrop has a goods fleet of 20 vehicles, most of them articulated 10-tonners. With the closing of redundant depots at Dewsbury, Huddersfield, Cooper Bridge and Ravenshorpe, the traffic formerly handled by these depots will be dealt with by road vehicles operating from Knostrop, where maintenance and



Bucket dredger by Fleming and Ferguson at Castleford and, right, the old Leeds depot of British Waterways

provision of new equipment such as dredgers, pontoons, excavators, cranes and mechanical handling equipment.

### New Inland Port

In addition and extra to the £5½-million programme, the North Eastern division has just opened its new Knostrop terminal depot, which has been officially and quite properly described as the inland port for Leeds. Eventually it will replace completely the old depot at Leeds Bridge which for 150 years has served as the main handling point on the Aire and Calder system. Ideas on what constitutes ideal wharfage and warehousing have changed radically since the last century; the old depot with its storage space crammed into seven storeys, its fixed cranes and lack of manoeuvrability is obsolete.

In looking for a new site the main prerequisite was one with plenty of elbow room, large enough

servicing facilities have been provided at the depot, together with a staff canteen.

### An Advantageous Service

The Aire and Calder Navigation has a length of 62½ miles, and handled a total tonnage of 2,741,369 in 1955. About a million tons of this was coal traffic, and of the remainder, some 125,000 tons represented merchandise specifically between Leeds and the Humber ports. This section is navigable by barges of up to 250 tons capacity while 170-ton craft can go up to Wakefield. For bulk consignments unloaded direct from ocean-going cargo boats, the service to Leeds is not only quicker, but considerably cheaper than road or rail. In this respect the advantage of being on the canal is decisive, and at Knostrop the 18-acre development site should prove an attractive proposition, as indeed, oil distributors in the West Riding have already been quick to realise.

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Second class saloon looking forward into drivers compartment.

Included amongst orders received for over 250 Diesel Railcars for The British Transport Commission's Modernisation Programme are a number of triple car units one of which is illustrated here.

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## LETTERS TO THE EDITOR

## Rail Link with London Airport

The Editor is always glad to receive letters from readers on subjects germane to the transport industry, but these should be written as concisely as possible. The opinions expressed therein must not, however, be regarded as having editorial endorsement. Where correspondents desire to use a nom-de-plume it is essential that the Editor should be informed of the name and full address of the writer as indication of good faith.

SIR,—Your editorial comment on the use of the Waterloo—Feltham line by airport passengers again underlines the need for a rail link and is, as you remark, an example of what can be achieved even with existing services, and without the use of monorails or similar grandiose schemes.

Even more to the point, is the existence of a further facility which could be provided by stopping the Reading line trains at Feltham, thus providing a nonstop service in each direction, with a running time of just over 20 minutes to Waterloo.

For the greater part of the day these trains are extremely lightly loaded and the additional stop would cause very little, if any, delay. In the down direction they invariably stop outside Staines whilst the preceding Windsor train departs and in the up direction have, in general, one or two minutes in hand at Staines, which could be utilised for calling at Feltham.

Four trains an hour would thus be provided, with the Windsor trains giving a connection at Richmond, with the District line, should anyone really wish to travel to Gloucester Road.—Yours faithfully,

J. TAYLOR.

46 Park Road, Hounslow, Middx.

## Canal Cuts

SIR,—In the article in MODERN TRANSPORT of June 7 on the new cut in the Trent and Mersey Canal you say that this is believed to be the first new section of canal cut in this country for over 50 years.

In the mid-thirties a new cut was made in the Sheffield and South Yorkshire Navigation to avoid a sharp reverse bend near Doncaster Gas Works.

I have no details of the work by me, but an estimate from the 1-in. map suggests that the new section is from 300 to 350 yd. and the section replaced about 750 yd. A portion of the old section was retained as a spur to the gas works, and the remainder was filled in.—Yours faithfully,

A. F. COOK.

The University,  
Southampton.

## Kearney High-Speed Railway

SIR,—I should like to congratulate you on the most interesting article on the Kearney High-Speed Railway which appeared in the issue of MODERN TRANSPORT dated May 31, 1958.

Of all the schemes put forward to serve London Airport none offers so much promise as the Kearney system. It has the three very important advantages: safety, speed and adaptability. Its safety factor is far higher than that of the orthodox twin-rail system, due to its exceptionally high degree of stability. It is designed to attain speeds in the 200-m.p.h. range normally and not "only under very carefully guarded circumstances" as on the French railways. As you have already stated, it is very versatile in application and can readily be used on the surface, elevated or underground.

## Low Rolling Resistance

One feature I believe you have not mentioned is that the extremely low rolling resistance and high tractive effort of the cars of the "Monoway" (as Mr. Kearney calls it in his book *Erone*) reduces the necessity of grading. The trains can take the hills in their stride.

Another advantage is the ability to take up discrepancies of gauge. A malalignment of the overhead rail, or an increase or decrease in track width, which would derail a train on the orthodox system, can all be compensated for by the telescopic column.

The great thing about the Monoway is that it is not a new fancy nor a copy of a foreign design of doubtful efficiency and economy. It is the invention of one of our leading railway consultants. It is not new, for it was demonstrated about 40 years ago, since which time the

(Continued at foot of next column)

## PUBLICATIONS RECEIVED

GARDNER DIESEL ENGINES. A new brochure (No. 740.2) by Norris, Heuty and Gardner, Limited, Barton Hall Engine Works, Patricroft, Manchester, giving basic information on the company's ranges of diesel engines for vehicle rail-traction and marine applications.

THE PREVENTION OF MIST AND ICE ON WINDOWS. A new technical bulletin (No. 5/58) published by the Triplex Safety Glass Co., Limited, Research Laboratory, King's Norton, Birmingham, 30, which describes the company's work in finding an answer to the serious problem of misting and icing of windcreens. Two new applications of the method of heating glass surfaces electrically have been developed by the Triplex company, using either invisible resistance wires less than .001 in. in diameter or a transparent gold film.

TURNALL ASBESTOS SHIPS BOARD. A new data booklet now available from Turners Asbestos Cement Co., Limited, Trafford Park, Manchester, to naval architects and the shipbuilding industry covers the uses of this non-combustible material that has been developed expressly to meet the conditions laid down by the International Convention for the Safety of Life at Sea (1948), which came into force in 1952.

WELDING DATA BOOK. A conveniently sized 180-page book describing simplified welding procedures for application to all metals at reduced temperatures now available free from Eutectic Welding Alloys Co., Limited, North Feltham Trading Estate, Feltham, Middlesex. A practical discussion of Eutectic's low-heat-input metal-joining process points out its greater flexibility, easier application and other advantages over welding with conventional materials.

MEGATOR UNIT PRESSURE SETS. A booklet published by and available from Megator Pumps and Compressors, Limited, 43 Berkeley Square, London, W.1, describing a new range of unit pressure sets for marine water supply systems. Pumps, control gear and all accessories are pre-assembled on a steel framework, with all interconnecting piping and wiring completed, requiring only to be connected into suction and delivery pipes and the electrical supply.

STEPPING OUT WITH PROGRESS. An informative leaflet published by the Morgan Crucible Co., Limited, Battersea Church Road, London, S.W.11, giving a brief history of the organisation, a complete list of products and subsidiary and associated companies in this and other countries.

CAUSILITE ELECTRIC FURNACE ELEMENTS. A new leaflet published by the Morgan Crucible Co., Limited, Battersea Church Road, London, S.W.11, giving details of a new non-metallic element for furnace heating, with range of sizes for various applications.

AIR CONDITIONING FOR ANY CLIMATE, ANYWHERE. A new illustrated booklet reviewing five of the most widely used Thermotank marine air-conditioning systems published by Thermotank, Limited, Helen Street, Glasgow, from whom copies are available. Also included is an outline of the adaptation of Thermotank systems to operate on the high-velocity principle and the results of an investigation into the meaning of the term "a comfortable temperature" based on the reactions of visitors to the experimental ship's cabin in the Thermotank research laboratory and on a series of experiments carried out aboard a number of ships.

(Continued from previous column)

inventor has developed it and fought for an opportunity to build and run a full-scale section. I hope sufficient interest will be aroused in the authorities for them to encourage the building of the Monoway, first to serve London Airport and then to improve London's own transport services. Yours faithfully,

K. A. STEEL, A.R.Ae.S., A.M.S.E. (Aero).  
88 Twyford Avenue, Acton, W.3.

## BOOK NOTICES

## Trade and Technical

MOTOR RACING CIRCUITS OF EUROPE. By Louis Klementaski, A.I.B.P., A.R.P.S., and Michael Frostick. (London: B. T. Batsford, Limited, 4 Fitzhardinge Street, Portman Square, W.1. Price 21s. net.) Although far removed from the mundane business of operating or driving a commercial vehicle, motor racing has been the anvil on which many developments that have improved the performance, safety and reliability have been forged and there is no true road transport man who is not thrilled by the sport. This book is basically a comprehensive review of the major racing venues of Europe, with a short text that brings the various circuits to life and introduces something of the atmosphere that has grown up around each.

SWITZERLAND'S AMAZING RAILWAYS. By Cecil J. Allen. (Edinburgh, 9: Thomas Nelson and Sons, Limited, Parkside Works. Price 25s.). One of the most attractive railway books ever to come our way, Cecil J. Allen on Switzerland, appeared five years ago in 1953 and has since accompanied us on several expeditions to that country. We specially welcome, therefore, a new and revised edition, which made its appearance on June 12. Particulars of the latest developments in cable railways and chair lifts have been brought up to date and the selection of photographs—which gives a better idea of Swiss scenery than the average travel book—has also been modified to show recent progress. The style of this doyen among railway authors remains as attractive to us as when we first read him nearly 50 years ago.

100 YEARS UNDER THE SOUTHERN CROSS. (London: Shaw Savill and Albion Co., Limited, 88 Leadenhall Street, E.C.3.) It was on May 28, 1858, that young Robert Ewart Shaw and his equally youthful partner Walter Savill dispatched their first chartered ship, the 435-ton iron screw steamer *Lord Ashley*, to Auckland. They had set their faith in the future of New Zealand and from then on helped to transform the land of the Southern Cross from scattered, trading and missionary settlements into a new British nation. A hundred years ago settlers' ships were often floating hells, but the newcomers set their faces against ill-treatment and fleeing of emigrants; alcoholic liquor was only permitted in tween deck cabins on doctor's orders, single men slept forward and unmarried girls aft behind a forbidding iron grating. The merger with the then competing Albion Line came in 1882, under the offer of a New Zealand Government subsidy for a direct service with the mother country. These and other fascinating events serve to introduce a handsome brochure produced by the company to celebrate the centenary of the original endeavour.

A PICTORIAL HISTORY OF THE FESTINIOG RAILWAY. (Portmadoc, Caernarfonshire: Festiniog Railway Company, Portmadoc Harbour Station. Price 2s. 6d. plus 5d. postage.) The Festiniog Railway Company may be the oldest narrow-gauge railway in the world but it has some quite up-to-date publicity ideas. The latest is a 24-page pictorial history of considerable merit, bound in a cover with a coloured view of a double Fairlie—one of the only two Fairlie locomotives still extant in the world, both of which are Festiniog property. Its other steam engine in going order is the 95-year-old *Prince*, an 0-4-0 saddle tank with tender. The latest publication well brings out the salient points of this remarkable railway's story—steam on the 1 ft. 11½ in. gauge, when Brunel and others had declared it impossible; the first bogie coaches in Britain; the vacuum brake; miniature electric train staff; and other features that made it the world's model narrow gauge line and for many years the object of many interested foreign delegations visiting Britain. North Wales may yet repeat this feat as a venue of railway interest under the present enthusiastic management.

BRITISH RADAR  
SPEEDOMETER

## Can Select Individual Vehicles

PRODUCTION of the first British-designed and produced radar speed check equipment is announced by Marconi's Wireless Telegraph Co., Limited. The device is named PETA (Portable Electronic Traffic Analyser) and it is claimed to remove one of the major objections to the use of radar as a means of checking the speed of road vehicles in that it can discriminate between individual vehicles even under conditions of dense traffic. It will provide separate readings on vehicles which are only 8 ft. apart and will automatically lock on to any individual reading if so desired. The speed range of the equipment is from two to 80 m.p.h. but this can be extended if required. The accuracy of speed assessment is said to be within 1 m.p.h.

PETA employs the Doppler effect of frequency change which occurs when electromagnetic waves are reflected from moving objects. This principle, in conjunction with the extremely narrow horizontal beam-width of the radiated signals (between 3 and 4 deg.), provides simplicity of design, portability and high accuracy of measurement, giving the user a device which calls for no technical skill in its operation. An extensive use has been made of transistors and printed circuits in order to achieve compactness and light weight. The complete equipment, which weighs only 21 lb., consists of a transmitter-receiver unit, with its associated aerial, and a meter unit calibrated directly in kilometres or miles per hour.

In practice, the aerial unit forms a baseplate for the transmitter-receiver unit. The equipment is placed in the open boot of a car with the aerial facing the oncoming traffic, or taken outside as convenient. The natural "squint angle" of the aerial is such that when the latter is physically at right angles to the road the transmitted beam is directed at the required angle of 20 deg. to the line of traffic. The standard version of the equipment incorporates a single-channel system; if discrimination between near- and far-lane traffic is required, a double-channel system is available as an optional extra.

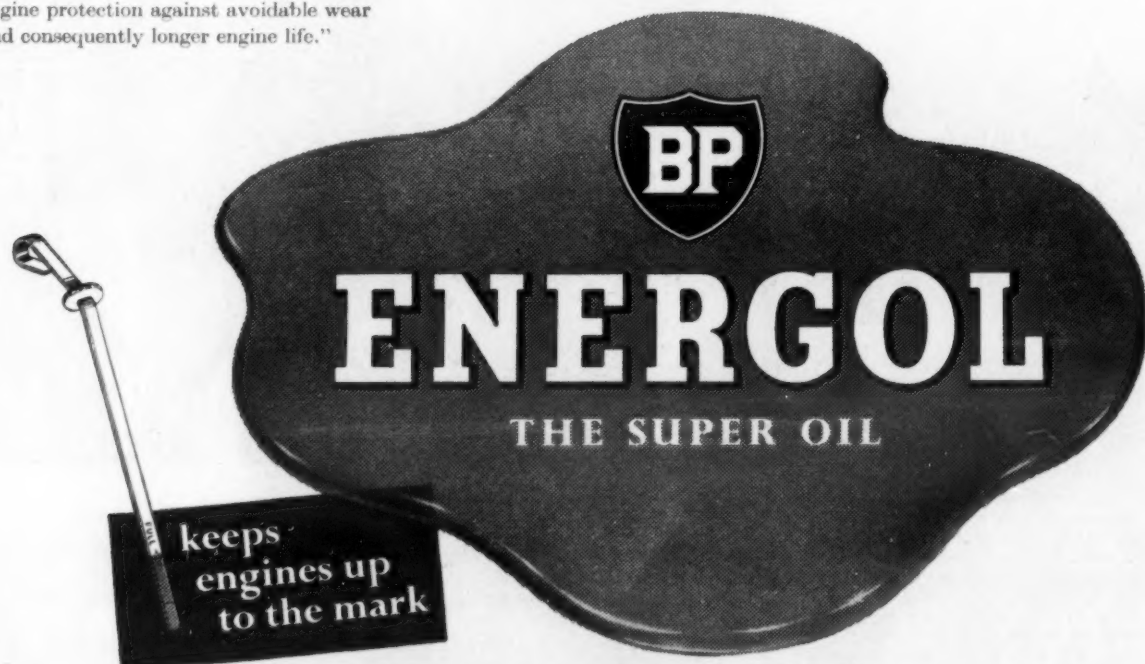
The potential uses of PETA are by no means confined to the operation of speed checks. By the use of a 35-mm. camera attachment and an analyser unit which is in the course of development, a record can be provided of the speed and frequency of traffic at any particular road point.

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## MECHANISATION OF COAL HANDLING

### Ford Tractor Division Demonstration

#### FROM RAILWAY WAGON TO HOPPER

TO foster interest in and provide information on the latest mechanical aids available, the tractor division of the Ford Motor Co., Limited, recently demonstrated a selection of Fordson tractor ancillary coal-handling equipment to a representative audience from the coal distribution and railway industries at the company's Dagenham works. Apart from railside hoppers to facilitate the discharging of coal wagons, mechanisation in the handling of domestic coal supplies was virtually non-existent prior to the end of the war. Even today, the traditional methods of emptying railway wagons and bagging and loading by shovel are general practice at the majority of the 4,800 railway and canal depots throughout the country.

Of these depots, 2,500 regularly employ 10 or more men on loading and unloading work. Yet only 80 of the larger ones have mechanical handling equipment such as mobile cranes, grabs and hoppers. A number of Britain's leading coal merchants have in recent years, equipped fully mechanised depots, but the proportion of domestic coal handled mechanically remains extremely small. Yet most coal merchants, from the large regional operators down to the smallest concerns, could reap some benefit from the mechanical handling aids now available, even if only by the relief of the present difficulty of recruiting adequate suitable labour.

#### Neal Pelican Loader

The Pelican loader has been introduced by R. H. Neal and Co., Limited, Ealing, N.W.5, for the handling of bulk materials out of railway wagons,

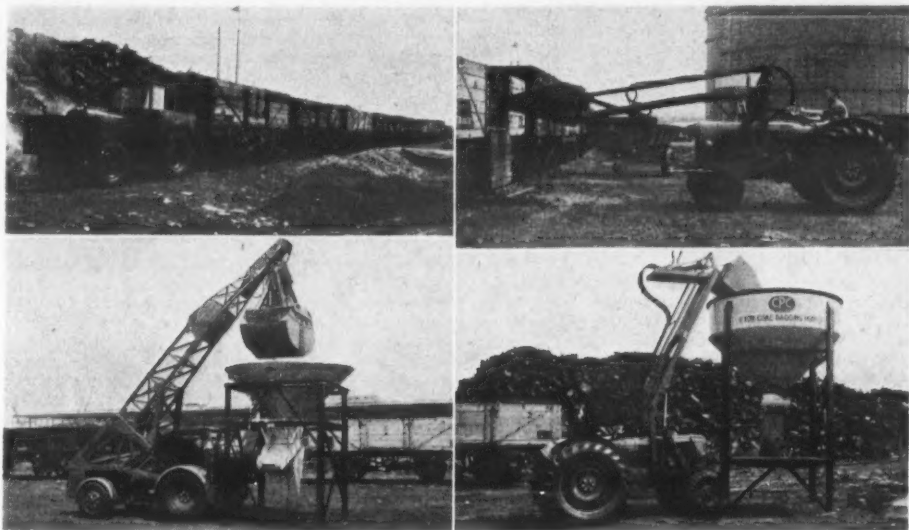
(about 20 to 30 cwt.) into the centre within reach of the shovel.

The Jumbo Junior crane by F. Taylor and Sons (Manchester), Limited, is mounted on a Fordson Major tractor operated back to front to provide maximum manoeuvrability. It has a turning circle of 25 ft. The hydraulically operated grab has a capacity of 1½ cu. yd. and the maximum clearance beneath the grab is 11 ft. 2 in. The crane frame is a triangulated steel structure with horizontal rams for even distribution of applied loads over the entire frame. Various jib extensions are available and an all-weather cab is standard.

#### Muir-Hill Shunter

A modern method of moving rail wagons is by the use of a diesel shunting tractor and these machines are proving extremely economical in yards and plants. The 48-h.p. Muir-Hill Model 100 shunter, produced by E. Boydell and Co., Limited, Old Trafford, is based on the Fordson Major tractor and weighs 8,500 lb.; it is capable of pushing 400,000 lb. on a straight level rail. One of the accompanying pictures shows one of these machines handling a rake of 12 wagons. In addition, the Muir-Hill shunter is also suitable for moving road trailers or for other small towing jobs around the yards and can be provided with a variety of differing types of buffer plate to suit different applications.

A two-wheeled dump trailer manufactured by Whitlock Bros., Limited, Great Waldham, is designed for carrying rock and other heavy materials such as coal, and will carry loads of up to five tons. Tipping is by twin hydraulic rams



Fordson Major industrial applications: a Muir-Hill shunter moving a rake of 12 wagons; a Stanhay Shovelall which can reach into difficult corners and discharge at heights up to 13 ft. (a Whitlock dump trailer can be seen alongside); below, a Taylor Jumbo Junior crane discharging into a hopper; and, right, the Shovelall discharging into a 4-ton coal-bagging hopper

particularly for unloading coal and coke. It is mounted on a Fordson Major tractor and incorporates a patented grab mounting, the grab being rigidly attached to a jib which can be pushed down by double-acting hydraulic rams. By this means, the lightweight grab is forced into the material instead of relying on its weight (as does a mechanical grab) which in the case of coal handling is said virtually to eliminate breakage.

There are two driving positions. For fast travelling between sites, the Pelican is driven from the normal tractor position but when operating the grab, the driver sits facing the rear of the machine with an improved field of vision. Various sizes of grabs are available up to 28 cu. ft. capacity, the size which is fitted to most of the machines working on coal and coke. Output varies according to the site conditions but figures up to 25 tons an hour have been recorded. Breakage and spillage from the bucket are negligible and with a little practice an operator can clear a rail wagon down to one hundredweight.

#### The Stanhay Shovelall

The Shovelall, developed by G. Stanhay (Ashford), Limited, is also fitted to a Fordson Major tractor and is designed to handle coal of all sizes through the standard doorway of railway wagons. It will pick up from ground level or floor height up to 6 ft. and will discharge into a lorry, trailer, hopper or storage bin at any height up to 13 ft., thus avoiding the breakage that occurs with an excessively high drop. Hydraulic power for the equipment is obtained from a constantly running hydraulic pump which is mounted in front of the tractor and driven from the crankshaft. The standard shovel is 12 cu. ft. capacity (average load of coal 4 to 5 cwt.) and it is kept at a preset angle through all lifting or loading motions. Total outreach of the shovel is 12 ft. beyond the bumper. Under favourable conditions, work capacity is about 10 to 12 tons an hour. Hand trimming necessary is from the rear corners of the wagon

underneath the body and the positive control of the tipping movement from the tractor driver's seat enables the load to be evenly spread when required. The sloping sides of the body and scow, combined with a tipping angle of 62 deg. and a high clearance ensures clean discharge and a low centre of gravity gives maximum stability over rough ground. The steel body measures 9 ft. 2 in. by 7 ft. by 2 ft. deep.

#### Coal-Bagging Hoppers

Four basic types of bagging hopper developed by C.P.C. (Southampton), Limited, have been designed to meet the needs of the coal distribution trades. The largest in the standard group is a 10-ton ground-level loader with a fully adjustable chute intended for use where large quantities of coal have to be bagged, and particularly useful for handling smokeless fuels. Overall height is 13 ft. 3 in. and it occupies a space only 10 ft. 6 in. square, making it practicable in sidings with little room to spare. A 5½-ton hopper, occupying a space 9 ft. square, is also a ground-level loader with a fully adjustable chute, useful in medium sized yards or in conjunction with a 10-ton hopper, while a 4-ton loader occupies a similar space and is designed for bagging coal at lorry height. The fourth size demonstrated, a 2½-ton hopper, is useful in situations where lifting height is limited. It has an overall height of 10 ft. and it takes up a space of 9 ft. square. Equipped with a fully adjustable chute, it can be used like the larger hoppers for all types of sacks and all types of fuel.

In his chairman's speech at the Dunlop annual general meeting, Mr. G. E. Beharrell said that several new products were introduced from the factory at Manchester in 1957 with encouraging results. These included Duotarp tarpaulin materials and a new plastic material under the name of Trakmark, the uses of which include road marking and deck covering.



During the annual summer convention of the Permanent Way Institution at Weston-super-Mare, members paid a visit to the new factory of the Permali group at Gloucester. Left to right there are seen above: Messrs. A. K. Fraser, of Griffiths Paints; L. G. B. Rock, assistant engineer (permanent way), B.R., Southern Region; H. Jones, secretary, Permanent Way Institution; H. Ormiston, Editor, "Permanent Way Institution Journal," West Riding district engineer, North Eastern Region; John Ratter, president, Permanent Way Institution and technical adviser to B.T.C.; N. W. Swinerton, railway consultant, Richard Costain, Limited; N. G. McCullagh, chief engineer, Permali, Limited; J. Hyde-Hollett, district engineer, Limerick, C.I.E.; G. Eyles, assistant (design), Southern Region; L. T. Starks, treasurer, Permanent Way Institution; T. A. Carson, assistant civil engineer, C.I.E., and W. L. Rigby, Aberdeen district engineer, Scottish Region, B.R.



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## NEWS FROM ALL QUARTERS

### Cork Bus Station

Tenders for the construction of a bus station for C.I.E. in Cork are to be invited in the next few months.

### Patricroft Motive Power Depot

Work is now in progress on the reconstruction of the "old" engine shed at Patricroft motive power depot (L.M.R.) only a small section of which remained after the major part of the shed was dismantled some years ago. It is being built to modern standards of design for servicing steam locomotives and will contribute to the efficient working of the depot.

### North-Eastern Home Counties Tour

A tour to include the Bishops Cleeve—Brain-tree branch, the Colne Valley and Halstead line, the connecting line at Bedford, and the Harpenden—Hemel Hempstead branch, has been arranged by the Railway Correspondence and Travel Society for Sunday, August 10, commencing from Liverpool Street at 9.57 a.m. and returning to St. Pancras at about 7.45 p.m.

### Western Region Train Cuts Listed

Three pamphlets have been prepared by the Western Region to give details of trains to be withdrawn from June 30 under the latest economy drive, and covering the areas (a) London, Bristol, Exeter and Plymouth; (b) Gloucester, Newport, Cardiff and Swansea; and (c) Worcester, Birmingham, Shrewsbury and Central Wales. A supplement to the summer timetable is to be issued immediately which will include all the alterations involved.

### Mersey Tunnel Tolls Modified

As proposals to increase Mersey Tunnel tolls on commercial vehicles have been substantially modified, the transport committee of Liverpool Chamber of Commerce has withdrawn the objection it submitted to the Minister of Transport. The Mersey Tunnel Joint Committee has now put forward the suggestion that for vehicles over 4 tons in weight the toll be 3s., with a similar fee for trailers. This is only 6d. more than the present charge and it has been accepted by all those organisations which had originally objected to the proposed 5s. toll.

### Technical Staff Needed in Malaya

Mr. C. G. Harrison, general manager of the Malayan Railway, who has just retired, says that more than 50 per cent of the railway's experienced technical expatriates have left because of "Malayanisation." Out of 68 expatriates in the service 18 months ago, only 30 are left. In time, Malayan officers would be capable of filling adequately every post in the service, he said, but the position became grave when technical assistance of the first quality could be lost before a sufficient number of qualified and experienced local men were ready to take over. About 25 Malaysians were being trained abroad on all aspects of railway work, but recruiting of engineers on contract from overseas to fill vacancies was not going very well because of the salaries offered. Mr. Harrison is to join a Sydney, Australia, engineering company.

### Ghent—Terneuzen Canal

Full agreement has been reached between the Netherlands and Belgium on the projected improvement of the Ghent—Terneuzen Canal, it is stated. It is proposed to make the canal wide and deep enough for the use of ships up to 690 ft. in length with a draught up to 36 ft. It is hoped that the work may start early in 1960.

### London Transport Locomotive Acquisition

London Transport has acquired another 0-6-0 steam pannier tank locomotive from the Western Region of British Railways. It formerly bore the Western Region number 5786, was built in 1929 by the Great Western Railway at Swindon and is now numbered L.92. Locomotive No. L.50, an 0-6-2 tank ex the Metropolitan Railway, which is being replaced by the new locomotive, was built by the Yorkshire Engine Company in 1901.

### Travel Staggering Discussed in New York

New York City administration authorities, in conjunction with the New York City Transit Authority and the City Planning Commission, are investigating staggered hours to relieve peak-hour travel to and from the metropolis. The transit authority has already tried, without significant success, to get mid-town businesses to stagger employees' hours. The city fathers are endeavouring to ascertain which businesses could advance or retard their starting and finishing times by up to 30 min.

### Position of Manx Electric Railway

A further Government statement on the financial position of the Manx Electric Railway says that after consultation with the Executive Council the Governor has decided to place on the agenda for next session of Tynwald a resolution to waive Standing Orders to allow the reconsideration of the vote of £25,000 for the railway. Earlier, following the refusal of Tynwald to approve a vote of £25,000 to help the railway this year, the three Government members of the Railway Board handed their resignations to the Governor. They included Sir Ralph Stevenson, the chairman.

### A New Use for Soap Coupons

From July 1 the New York City Transit Authority will derive additional revenue (it is hoped) from taking in other people's washing—or rather, from accepting soap coupons. The B.T. Babbitt Company has negotiated a contract with the city transport undertaking whereby every can of household cleanser sold in the New York metropolitan area carries a coupon. Three coupons may be used to buy a 15-cent bus or subway ride and the transit authority will collect 5 cents from the manufacturer for every such ride. The Babbitt company is described as an "aggressive merchandiser" prepared to expend possibly some million dollars on this scheme; the transit authority may secure additional revenue to stave off an increase in the 15-cent fare. Whether the Babbitt contract is exclusive is not known. Sour comment from ticket clerks is that they are "not going to get worked up into a lather" counting soap coupons without something to show for it.

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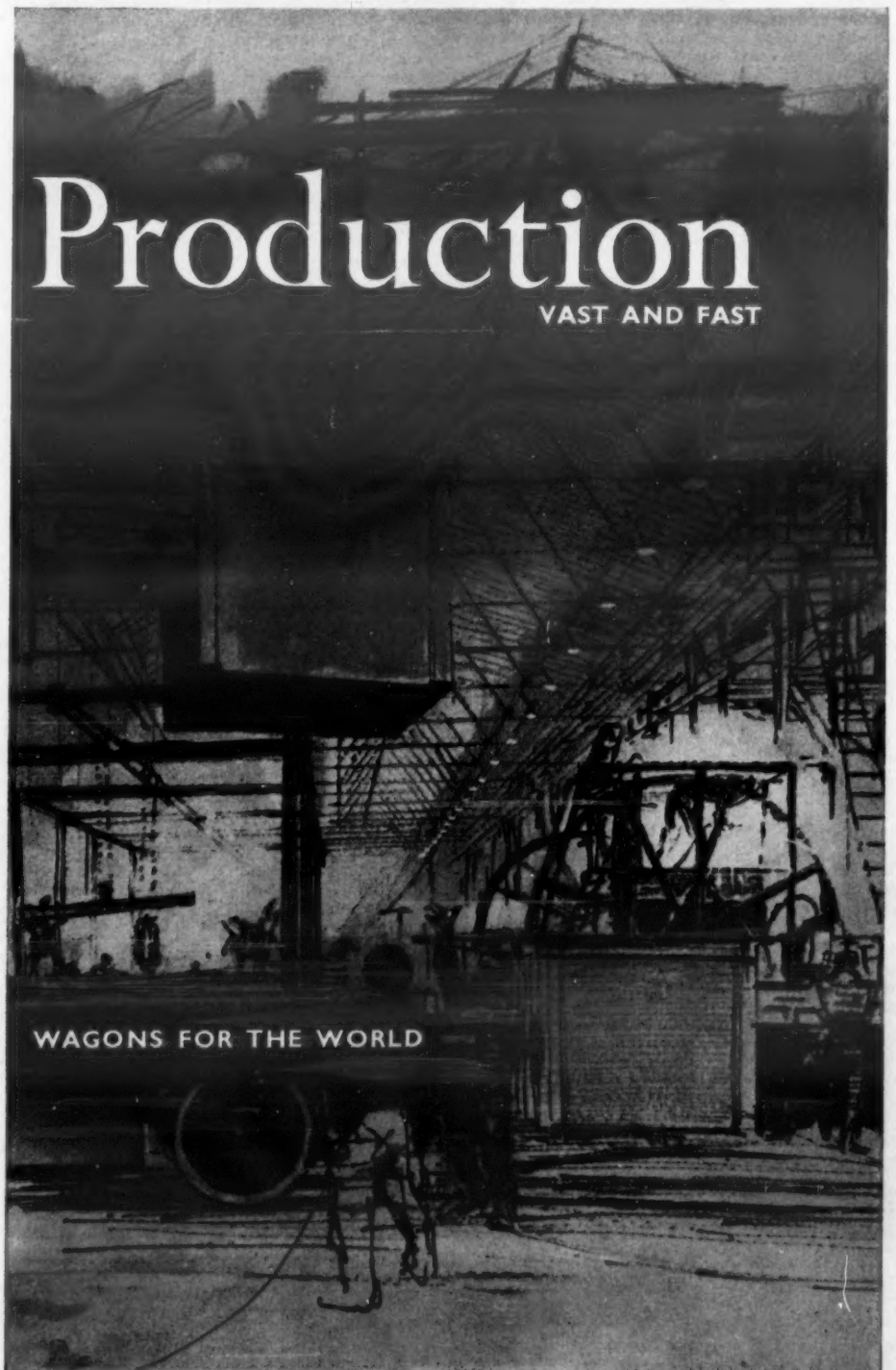
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## COMMERCIAL AVIATION

### Improving British A.T.C.

#### FUTURE OF W.A.A.C.

THE Minister of Transport and Civil Aviation, Mr. Harold Watkinson, last week authorised a five-year plan to modernise the United Kingdom national airways system, costing about £5 million. The plan will be started this year. Four new long-range radar stations are to be built at strategic points, one in South-East England, one in the Manchester area, one in the west country and one near Prestwick in Scotland. The plan also provides for the installation of electronic and other automatic devices for receiving, storing and displaying information required by the air traffic controllers. The service area covered by ground radar equipment for a.t.c. purposes will be considerably extended and within the next few years practically all the United Kingdom airways will be scanned by modern long-range ground radar. The four new stations to be built for this purpose will have low-level coverage of up to 85 miles on a small aircraft, with considerably greater ranges at height. The radar information will be transmitted automatically to the three air traffic control centres. Proposals for meeting these requirements have been put forward by the British radio industry and are being considered by the Ministry. The a.t.c. centres are to be rebuilt and re-equipped and work is in hand on plans to mechanise the entire process of flight plan handling. New accommodation and better equipment is to be provided for the Ministry's air traffic control school at Hurn and it is also the intention to move the a.t.c. experimental unit to that airport.

#### Airport Activity in March

Air transport movements at United Kingdom aerodromes numbered 19,213 in March, 1958, and passenger traffic was 365,921, increases of 8 per cent and under 1 per cent respectively compared with March, 1957. Freight on and off loaded amounted to 10,140 short tons, an increase of 8 per cent, while Post Office mail decreased by 1 per cent to 1,553 short tons. At London Airport there were 7,768 air transport movements, an increase of 6 per cent over March, 1957, and 214,931 passengers were handled, an increase of nearly 3 per cent. Airports at which passenger traffic increased considerably over March, 1957, were Ferryfield (129 per cent), Glasgow (10 per cent) and Southend (9 per cent) and other substantial increases were recorded at Cardiff, Newcastle, Croydon, Scilly Isles, Land's End and Stornoway.

#### Rolls-Royce Noise Suppression on DC8

The Douglas Aircraft Company has fitted noise-suppressing nozzles of Rolls-Royce design to the Pratt and Whitney engines in the first DC8 air liner which was rolled out recently at Santa Monica, California. This type of nozzle is being used as an interim device until the Douglas company's own exhaust equipment becomes available. Production noise suppressors designed and made by Rolls-Royce are already fitted to the Avon engines of the de Havilland Comet and those airlines which have specified Conway engines for their Boeing 707-420's will have Rolls-Royce suppressors incorporated in the complete engine pod which is being built by Rolls-Royce. In addition, the Boeing company's own noise suppression equipment which will be fitted to the other 707s is based on Rolls-Royce research.

#### Circular Tours by Air

The Minister of Transport and Civil Aviation has asked the Air Transport Advisory Council to advise him in future on applications for his approval of arrangements made under Section 24(3)(C) of the Air Corporation Act, 1949, to carry parties on circular tours by air. These services are exempt from the general reservation of air services to the airways corporations and their associates, provided the arrangements are approved by the Minister as being in the public interest. The decision to seek the advice of A.T.A.C. has been taken because of the increased number of applications now being received and the similarity of the proposed arrangements in some cases to the inclusive tour holiday services, operated under associate arrangements with the air corporations. British airlines are being informed of the change in procedure and the necessary forms can be obtained from A.T.A.C. which is now ready to receive and consider applications.

#### Future of W.A.A.C.

The West African Air Transport Authority and the West African Airways Corporation were set up by a United Kingdom Order in Council, and with the coming independence of Ghana it was felt by its Government that it was no longer fitting that Ghana should be bound by this United Kingdom Order. The Ghana Minister of Communications accordingly informed the West African Air Transport Authority when it met early in 1957 that his Government could not be bound by the Order in Council or remain a member of the Air Transport Authority for more than a limited time owing to the rapid approach of independence. He also said that Ghana would, in due course, have to form its own airline. The Government of the Federation of Nigeria therefore realised that it was only a matter of time before Ghana would withdraw both from the Air Transport Authority and from West African Airways. The Federal Government was also aware that the Government of Ghana was negotiating with various airlines with a view to forming its own airline. By March of this year the position was still not clear and the Federal Government accordingly decided that it could no longer wait for the Government of Ghana to announce its final intentions as to when it would form its own airline and, therefore, gave notice to the Governments of Ghana, Sierra Leone, and the Gambia, that it would proceed to form a new company in Nigeria to perform the services at present being carried out by West African Airways.

The Government decided to form a new airline, registered in Nigeria, with commercial partners, but that it would retain the controlling interest. The new Nigerian company will have considerably greater capital than the existing West African Airways Corporation and operate all West African Airways Corporation's existing services, including the west coast service from Lagos to Dakar and Sierra Leone Airways, but not the internal services within Ghana which will be taken over by Ghana Airways. The new company will commence operation on October 1, 1958, the day after the present West African Airways Corporation ceases to exist. There will thus be no break in operation. The new company hopes to co-operate fully with Ghana Airways by reciprocal agency agreements and mutual technical aid.

## PRESIDENT OF THE S.M.M.T.



*Reay Geddes*

Mr. REAY GEDDES, O.B.E.

Elected president of the Society of Motor Manufacturers and Traders for 1958-59, as already recorded in MODERN TRANSPORT, Mr. Anthony Reay Mackay Geddes, who is a managing director of the Dunlop Rubber Co., Limited, is the youngest son of the late Sir Eric Geddes, the first Minister of Transport. Born at Harrogate on May 7, 1912, and educated at Rugby School and Cambridge University, he joined the Dunlop Rubber Company in 1935, after a banking apprenticeship with the Bank of England. He served in England, France, Germany and India until the outbreak of war in 1939, when, as a member of the R.A.F.V.R., which he had joined as a pilot in 1937, he was recalled to the Royal Air Force. He served to the end of 1945, chiefly in South East Asia, latterly becoming Deputy Director of Air Transport at the Air Ministry, and was awarded the O.B.E. He rejoined the Dunlop company after the war as overseas sales manager, later joining the main board of the company and becoming the executive director responsible for overseas administration and sales. In 1952 he became responsible for the group's general sales and distribution at home and, in 1957, was appointed a managing director. Mr. Geddes is a member of the grand council of the Federation of British Industries and of its economic policy committee, and a past-president of the Federation of British Rubber and Allied Manufacturers Associations. He has been chairman of the International Road Federation (London), and was a vice-president of the Society of Motor Manufacturers and Traders for 1957-58.

## IN PARLIAMENT

### Traffic Flow in London

#### EASIER FOR SHIPPING

MEAN journey and running speeds of traffic in Central London had not altered significantly during the bus strike, although the number of vehicles had increased and the pattern of movement varied, said Mr. H. WATKINSON, Minister of Transport, at question time last week. He stated his belief that any attempt to exercise direct control over the number of private cars entering Central London would be impracticable and undesirable. As regards buses, the chairman of London Transport had already said that there would have to be a considerable reduction in mileage in the London Transport area when work was resumed. Mr. C. OSBORNE, his questioner, tried a little egging on—did "considerable" mean withdrawal of more than half the buses? Mr. Watkinson retreated into his shell; whether there was room left now for more than half the buses to come back was "like all these things a matter of opinion, also the statement that 2½ private cars equal one bus."

#### Strand Underpass through Tram Subway

A scheme has been devised for adapting part of the former Kingsway tram subway as a vehicle underpass beneath the Strand—Aldwych intersection and is at present under consideration by the London County Council, said the Minister of Transport. (The section of this tunnel under Kingsway itself is being used for commercial storage purposes.)

#### Easier Credit for Shipping

Restrictions placed by the Government on the sources from which the shipping industry can raise credit will be removed, the Minister of Transport announced in a debate on June 19. There would also be an end to control over the sale of ships for scrap, removal of shipping transfer regulations and Lloyds Licence Regulations—irksome measures dating back in some cases to 1939—would also improve the situation for British owners. He did not discount the possibility of further tax relief.

#### Direction Indicators on Goods Vehicles

With a view to improving the visibility of direction indicators where fitted to "heavy lorries," the Minister of Transport intends making regulations, to apply early next year, so that it would be obligatory that where traffic indicators are fitted to vehicles they shall conform to a certain standard, his Parliamentary Secretary, Mr. G. R. NUGENT, told a questioner. The requirement would not be extended to old vehicles at that time, nor would traffic indicators become obligatory on any vehicle.

#### Car Delivery Vehicles on Trade Plates

The Minister of Transport told Miss E. BURTON that a clause was being inserted during the committee stage of the Finance Bill to remove the anomaly whereby the operation of car delivery vehicles is made possible under general trade licences when carriers' A- or B-licences are not required. Mr. WATKINSON also told Miss Burton that he was pursuing inquiries into her allegations that drivers of such vehicles were contravening section 19 of the Road Traffic Act, 1930—the difficulty was to find people to give evidence.

#### Railway Economies

A new statement by the Minister of Transport on June 18 about economy measures to be effected by British Railways to accommodate its wage agreement added little fresh in tangible developments. The Western Region passenger train mileage cuts will represent 9 per cent of previous mileage—a total of 635 trains weekly is involved but not all will be withdrawn; overtime and weekend working has been eliminated at a number of railway workshops; recruitment, normally rising at this time of the year, is being severely reduced and normal wastage is not being fully replaced; over 30 branch-line services will come before the transport users consultative committees within the next few months.

#### Road Traffic Act Enforcement

A not unexpected question from Mr. ERNEST DAVIES addressed to the Minister of Transport asked him whether he had noted the large increase, noted in the summaries of the reports of the licensing authorities for 1956-57, in hours and records offences by drivers of goods vehicles and what he was going to do about it. (The reports show an increase of 91 per cent in convictions relating to excessive hours and of 69 per cent in respect of records compared with the previous 12 months.) Mr. G. R. H. NUGENT, replying, repeated his conviction that the increases were due to the large number of additional vehicles on the roads and were not excessive having regard to that factor. But recruitment of additional enforcement staff could be undertaken. Mr. Davies countered that enforcement staff, now totalling 105, was five more than prewar, despite the higher vehicle population that Mr. Nugent had put forward. The Parliamentary Secretary explained that 52 driving examiners would be drawn off and "in order to find sufficient scope from that number we now have authority to raise the establishment by 40." There were therefore good prospects of increasing the numbers on enforcement this autumn.

#### London Airport and Gatwick Communications

Was the Minister aware that there are no non-stop trains between Victoria and Gatwick Airport, that the minimum time taken is 40 minutes and that many trains take longer? asked Mr. ERNEST DAVIES. Some of the benefits of siting the airport where it was, with a new railway station, were therefore lost. Mr. H. WATKINSON: This matter needs looking into again and the Commission is doing so. The question of a direct surface route for interchange between London Airport and Gatwick was also being examined, he said.

Mr. W. TEELING suggested to Mr. A. S. NEAVE, Joint Parliamentary Secretary, Ministry of Transport and Civil Aviation, that as travel between Waterloo and London Airport via the emergency route set up during the London bus strike was quicker and cheaper than the special B.E.A. coach service, the latter should be abandoned. (During the strike, which affected the B.E.A. service, whose drivers are supplied by London Transport, passengers proceeded by train from Waterloo to Feltham, whence an emergency coach service was organised.) Mr. Neave said he could not support this view. The scheduled time for airport coaches from West London Air Terminal was 40 min.; via Feltham the time was 56 min. The coach service was provided free; if a proper charge was made the total fare would exceed the airport coach fare.



# NEW MARSHALLING YARD AT MARGAM

## Railway Side of Welsh Steel Transport

### WESTERN REGION ENTERPRISE

CONSTRUCTION is now proceeding on a new marshalling yard planned by the Western Region of British Railways. It is adjacent to the South Wales main line between Pyle and Port Talbot (Glam). Discussion with the former Great Western Railway regarding facilities required for the development of the large strip mill project at Port Talbot started in 1944; this resulted in a comprehensive layout plan of running lines and sidings designed to serve the scheme as then envisaged. This work was put in hand in 1947 and completed in 1949. The Steel Company of Wales, however, continued to develop its works to keep in step with their cold reduction plants at Trostre and Velindre, both of which are in full production, and in the light of increasing rail traffic at Port Talbot, Llanelli and other points in South Wales, the scheme for the construction of this modern yard was prepared. Parliamentary powers for the purchase of land were obtained in 1956.

#### Layout

The yard, which covers an area of 178 acres, includes 12 reception sidings with up and down running lines on either side and centre hump locomotive return road; the hump and control tower; 48 sorting sidings with two primary and eight secondary retarders; storage sidings (already constructed); lines leading to Steel Company of Wales works; an independent line for up coal empties traffic from Steel Company of Wales; and provision for a motive power depot at a later stage, also the doubling of the Ogmere Valley extension line from Margam Moors to Newlands signalbox and other associated works.

The longest siding in the sorting group will be about 700 yd. and a large proportion of the sidings in this group are to serve the Steel Company of Wales traffic and the layout provides for this. Traffic passing over the hump and through the sorting sidings will be regulated through the medium of the control tower and this, together with the working of retarders, will be fully automatic. With the exception of junctions, diamonds, compounds and insulated joints, etc., the rail joints will be welded by the Thermit process.

#### Staff Provision

An amenity block for the accommodation of the yardmaster and his staff will be provided near the

hump with road access from Water Street and a road communication will be provided thence to the control tower and beyond. Another three amenity blocks will be distributed over the layout. Side slopes will be soiled and sown with grass seed; soil has already been set aside for this purpose. In addition to the control tower there will be a signalbox at the outlet of the sorting sidings.

#### Problems

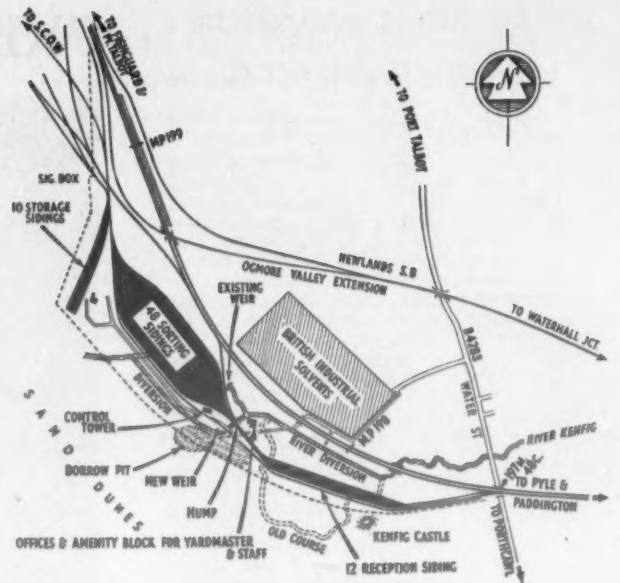
The construction of such a yard involved many problems. The River Kenfig unfortunately traverses the site of the layout and the river water is impounded in the upper reach by a weir which affords a supply of water by pumping for the Steel Company of Wales. The displacement of this weir and the provision of a new one on another site is at present in the design stage, and it will be necessary to build a temporary weir. The welfare of small numbers of migratory fish has engaged the attention of British Railways and the River Board, and it is hoped that a solution has been found. The possibility of blown sand invading the area has not been overlooked, and this will be dealt with by the planting of suitable grasses to arrest the travel of sand towards the railway.

The permanent way, plain line fittings, timbers

The main contract which was entered into in June, 1957, provided for the diversion of the River Kenfig, earthworks, including the formation of the large borrow pit, fencing and footpaths, permanent way, a new underline bridge at Water Street at the London end, a fly-over bridge at the outlet of the sorting sidings, small bridges associated with the river diversion, a road bridge and culvert under the hump, cattle pens and drainage. The execution of the earthworks in an area covered in blown sand is one of the main governing features in carrying out this scheme. Over some areas there is rough grass and vegetation, but towards the sea and within the contract area there are extensive sand dunes. These must be stabilised against the effects of wind drift.

#### Earth moving

To date the contractor's operations have been confined mainly to the moving of sand in large



Site of Margam marshalling yard

this great yard is about 60 per cent completed. One of the main determining features in completing the contract within the specified period will be dependent upon the flow of bottom and top ballast, the laying in of plain line and fittings and the subsequent welding of rail joints. This will be a prerequisite to the installation of the electrical and other equipment in the control tower and the completion of retarders, cable ducts, cable leads and other services. The permanent way comprises about 60,000 yd. of plain line, 170 single connections, five diamonds, three single and 10 double compounds.

British Railways will also supply all the prestressed concrete units from Taunton concrete depot. Prestressed piles will be supplied by the contractor. The 14 reception sidings have a maximum length of 2,485 ft., minimum 1,630 ft.; the 48 sorting sidings range from 2,180 ft. down to 935 ft. The gradient approaching the hump summit is 1 in 50 and that leading to sorting sidings is 1 in 80. In the sorting sidings the 1 in 80 decreases to 1 in 500 and becomes level.

#### Mechanical Sorting

Handling of wagons into the reception sidings and through to the sorting sidings will be controlled entirely from the control tower. A single

(Continued on page 12)



Earth-moving equipment preparing the site of the new Western Region marshalling yard at Margam and, centre, the control tower under construction

and other components are being supplied by British Railways and in the first instance it was necessary to provide a suitable stacking ground for the reception and distribution of this material, some of which is new and some serviceable material recovered from re-laying. A preliminary contract in this connection was entered into in May, 1957, and made provision for the stacking of plain line and fittings, etc.; much of the plain line will be in 60-ft. preassembled lengths. This contract was completed in August, 1957.

quantities. As stated previously the scheme includes the formation of a large borrow pit as otherwise the earthwork quantities would be out of balance. The main earthwork quantities are: bulk excavation in levelling site, 260,000 cu. yd.; bulk excavation in borrow pit, 268,000 cu. yd.; and bulk excavation and lead to up empties embankment, 25,000 cu. yd. The earth-moving machinery on site includes seven diesel tractors, seven 20-cu. yd. scrapers, one dragline, and maintenance units. At the present the earthwork for



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MODERN AIRWAYS and COMMERCIAL AVIATION SECTION

## AIRPORT LIGHTING

### New High-Intensity Equipment at Southend

A NEW high-intensity runway lighting system, designed by the General Electric Co., Limited, has recently been installed at Southend Airport. It provides the first installation of its kind on any civil airport in Britain. The lighting unit used (G.E.C. type ZA.105) is a new type employing a heat-resisting single-piece glass refractor giving a bi-directional high-intensity light distribution, together with an omni-directional component. When used with the Osram 200-watt 6.6-amp. series burning lamp it provides a maximum intensity in the main beams of 35,000 candelas and an average omni-directional compon-

ent of 3,000 candelas. In spite of the comparatively large light source, it has been possible by careful design to limit the height of the unit above ground to meet the operating requirements of modern aircraft.

The airport was raised to international standards last year when two paved runways, taxiways and apron were provided and a complete G.E.C. lighting system installed. This system, amongst other equipment, included high-intensity approach lighting and low-intensity runway lighting. Whilst this installation enabled a very high degree of utilisation to be attained, the provision of the new high-intensity runway system now permits the very fullest use of the high-intensity approach lighting and radar approach aid in bad visibility conditions such as occur from time to time.

#### Displaced Thresholds

Displaced thresholds have been provided in the new system, and as in the case of the low-intensity lighting installed earlier, these thresholds are marked by wing bars. For the high-intensity system these consist of rows of four high-intensity uni-directional lights (G.E.C. type ZA.104) fitted with green filters and 100-watt 6.6-amp. series burning lamps, whilst the ends of the runway are marked by a row of four similar units. The new runway lighting is operated by an entirely new system of remote control employing G.E.C. d.c. Multiplex equipment. This too is the first system of its kind to be installed on any civil airport. The system comprises a number of channels each consisting of a transistorised transmitter and receiver and so adjusted for frequency that up to 12 channels can operate simultaneously on a single pair of pilot wires. At Southend four channels are used at present to provide five steps of brightness control and monitoring on a single pair of wires, but the same pair could accommodate additional channels for up to eight further control or monitoring circuits.

Provision has been made also for installing two high-intensity angle of approach (glide path) indicators later in the year. These units are high-intensity versions of the conventional three-colour

#### TRAFFIC HANDLED AT SOUTHEND AIRPORT

Year	No. of movements	Passengers handled	Freight (tons) including cars
1948	401	757	—
1951	4,045	10,365	170
1952	5,890	13,845	220
1953	6,328	13,550	00
1954	8,530	21,545	1,975
1955	12,650	45,500	9,476
1956	14,778	86,286	12,722
1957	18,923	141,000	18,000

units already installed and are designed to operate with 2-kW Osram projector lamps. The complete runway and threshold lighting circuit is energised by a 15-kW constant current regulator which provides closely controlled current at 6.6 amps, when operated at maximum brightness, and at the intermediate currents to provide four lower brightness settings which are available for use in less severe operating conditions. As a result of the facilities installed last year, Southend has been selected as an alternative to London Airport by various airlines operating European services and the growth in traffic since 1948 may be judged from an accompanying table.

The installation of the new equipment, all of which was supplied by G.E.C., was carried out in co-operation with the airport authorities and, as with the previous installation, was installed by C. Maurice Contractors, Limited, of Bishops Cleeve.



The new high-intensity lighting on the main runway at Southend Airport

## Britannia Maintenance Docks

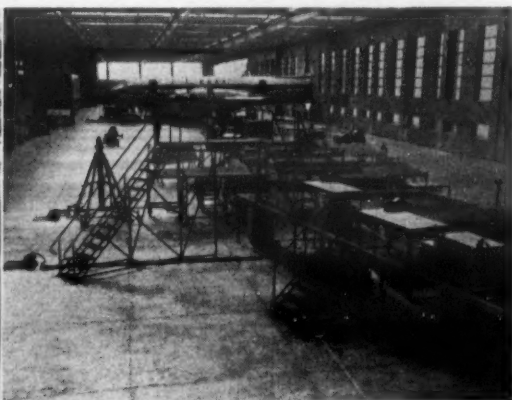
### MERCURY EQUIPMENT AT LONDON AIRPORT

QUICKER, easier and more efficient methods of maintenance by bringing the maintenance engineers and their tools directly on to the job in hand are the aim of the new docks which have recently been installed in the British Overseas Airways Corporation wing hangar at London Airport for servicing Britannia air liners. Designed from a general B.O.A.C. scheme and supplied by Mercury Airfield Equipment, Limited, of Gloucester, the newly formed associate company of

it conforms to the entire shape of the inner wing concentrated work area and forward to the freight compartment area of a Britannia. The key position of the dock is, of course, the position of the Britannia's four propellers and the staging so fits that the propellers can be revolved while the aircraft is in position in the dock. The working platform of the dock follows the dihedral angle of the main plane at a distance of about 5 ft. 6 in., thereby providing a safe working platform at an



Attending to the outer starboard Bristol Proteus engine of a Britannia 102 in the Mercury maintenance dock which allows easy rotation of the propeller; right, dock staging ready for the insertion of a Britannia



the old-established Mercury Truck and Tractor Co., Limited, which supplies many of the tractors used on London Airport, the four docks now in use are the first of this design to be erected in this country and it would appear that a considerable saving in maintenance time will result from their use. This saving in maintenance costs is such that tentative inquiries for similar docks have been received by Mercury from overseas operators of Britannias.

#### Adaptability

The docks at London Airport were designed and tailor-made to accommodate both the Britannia 102 and 312 aircraft, and although there is a difference of some 10 ft. in the respective overall lengths of these aircraft the construction is such that any of the docks can deal with either type of aircraft. Built on the unit principle, each section was easily transported from Gloucester to London and rapidly assembled in the precise position previously marked out by B.O.A.C. technical staff. The docks are screwed to the floor but can easily be dismantled and moved elsewhere.

The dock itself consists fundamentally of a series of platforms, so constructed and assembled that

optimum working height throughout the concentrated work areas.

For work on the engines eight elevating platforms are provided, one on each side of each engine. These are air-operated and adjustable over a height of 4 ft., with controls on the platforms themselves. Both air and electrical services are tapped from permanent supplies in the hangar to a central point on the dock and then fed to various strategic points throughout the dock area. This reduces potentially dangerous trailing and exposed leads to a minimum and takes the service where it is most needed.

Work benches are fitted at intervals on the staging, each bench being equipped with vice and rack. Once a maintenance engineer is on the job there is little or no need for him to leave the staging until his work is completed. Up to 50 men can easily be employed on the dock at any one time. By dint of platforms, lifts, electrical and air services, work benches and lighting, the Britannia can undergo major and minor overhaul and repair with the minimum amount of inconvenience and dislocation and with a quick turnaround which is so desirable. Britannias are towed in and out of the dock itself by Mercury Alrtug 70P tractors.

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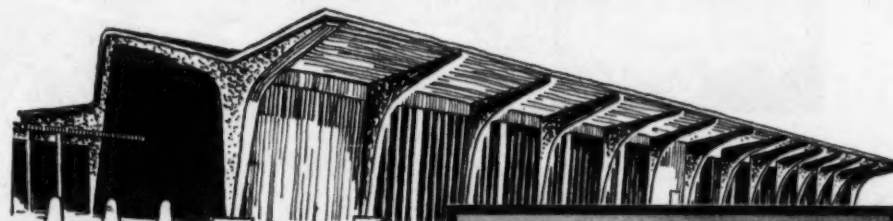
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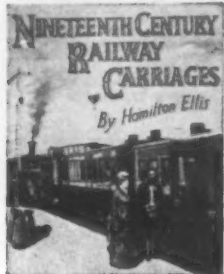
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MOBILE B.P. DISPLAY  
VEHICLE

## Bakelite Resin-Fibreglass Body

A MOBILE display housed in an attractive four-wheeled road trailer, for use in Belgium during the World Fair, has been designed and built to the requirements of the British Petroleum Co., Limited, by Locomotors, Limited, Birmingham, in collaboration with Harris and Sheldon, Limited, London. The bodywork is entirely of Bakelite polyester resin SR 19037 reinforced with Fibreglass chopped strand mat.

The display trailer, which has moulded panels

shape, in which the higher sides make round-topped fins at their junction with the roof. The two sides of each lifting panel were similarly moulded on their wooden frameworks by low pressure, then moulded together in a male and female mould. The resin used was pigmented green and yellow. To achieve the desired high-gloss finish for the familiar B.P. colours, the whole bodywork was cellulosed and silicone-wax polished. As the moulding is colour impregnated, scratches and traffic stains will be less likely to show. The unit carries its own special Continental repair kit, including resin and glass fibre.

## Special Features

Special features of the trailer include a rear yellow resin-glass fibre bumper bar into which are moulded polished aluminium flashing strips with a green plastics inlay and four 13-ft. 11-in. high sectional anodised-aluminium flagpoles for the B.P. flags which are housed when dismantled in a special crosswise stowage, reached through an access panel towards the rear of the trailer. To prevent rain reaching the interior, V-shaped gutter channels are fitted in the canopy door edges.

The steel chassis, with tubular torsion members, was built for Locomotors by Charles Pitt (Barton Stacey), Limited. The materials used for framing were ash, cedar and pine, the mast sockets and other fittings being in polished aluminium. On each side of the trailer beneath the flush-fitting, moulded lifting panels are smaller hinged rectangular panels faced with West African mahogany mouldings, and these provide access to the rear wheels and axles. The unusual curved roof has mushroom ventilators between the fins. A special mains switchboard and transformer unit is fitted to accept varying Continental power supplies. The total weight of the trailer is about 50 cwt.

The Cunard Steam Ship Co., Limited, announces that the directors have elected to a seat on the board of the company Mr. Philip E. Bates. He has also been elected a director of Cunard White Star, Limited.



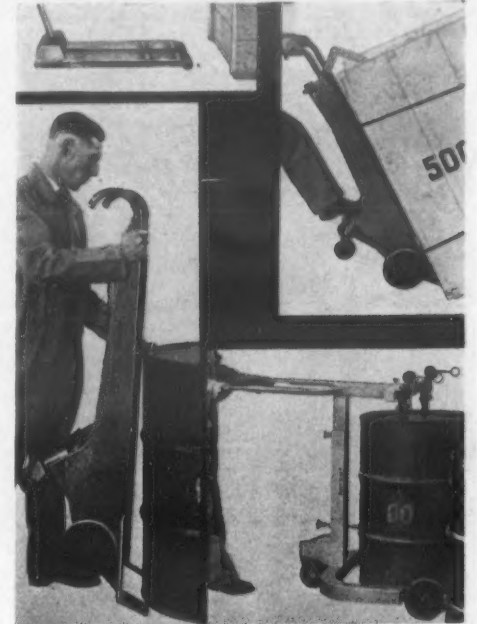
The Bakelite resin-Fibreglass display trailer for use in Belgium by British Petroleum Company

on each side lifting as canopies to reveal two-language displays showing B.P. oil exploration and production, has a central through corridor for cinema back-projection on to a screen at the rear of the trailer, shielded by a smaller lifting canopy panel. A fourth lifting panel at the front provides access to the projection apparatus and display lighting. All the panels when closed fit imperceptibly into the streamlined shape of the trailer body. The curved body panels, including the roof, were low-pressure moulded with a light-wood framework incorporated to form the finished integral

HAND TRUCKS BY  
CONVEYANCER

## Skidtruk—Drumtruk—Handtruk

DEMAND for inexpensive hand-operated equipment for movement of materials or products has not diminished with the advent of much more complicated mechanical handling devices. At the Mechanical Handling Exhibition, Conveyancer Fork Trucks, Limited, showed for the first time three hand trucks which are announced under the marque Conveyancer—Lande. The Skidtruk is a device resembling a hand pallet truck for moving cases or similar rigid objects. To lift the load, a steel tongue attached to the operating handle, which runs in a longitudinal slide, is inserted under the case, which is then levered up so that the truck, which is mounted on rollers, may be pushed under the case with the foot. Twin rollers in the truck frame enable the load to be lifted clear of the ground while this operation is completed. The



The Conveyancer Skidtruk (top left); two views of the Handtruk; the Drumtruk (bottom right)

truck is then drawn with the handle in position 45 deg. to the vertical. It is claimed that loads of up to 1,750 lb. can be handled with this piece of equipment.

The Drumtruk is operated by pushing or manoeuvring until a pair of automatic grippers (see illustration) engage the rim. Application of downward pressure to the handle lifts the drum which is carried between the three wheels of the truck. A special virtue of this equipment, it is claimed, is that it is easy to draw out drums or barrels which are stacked close together. The truck provides a stable means of transport for open containers carrying liquids. The Conveyancer Handtruk, which like the Drumtruk has a capacity of about 1,100 lb., is seen twice in the accompanying illustrations. An adjustable sharp-edged clamp is used to engage the rim of a drum or the battens of a packing case before it is levered into the transport position.

## NEW YARD AT MARGAM

(Continued from page 10)

control panel will be provided for the operating of the reception sidings signals and also for the manual control of the retarders and points leading to the sorting sidings. The diagram-type control panel will have the route signal switches for reception sidings at the right. The left-hand panel will provide an overriding manual control for sorting sidings points and retarders.

While trains are standing in the reception sidings, a shunter walking along the train will list the cuts for sorting, which will be transmitted to the control tower and there transferred to a punched paper tape. When the train is to be humped the punched tape will be fed into a reader which will route wagons to their correct sidings as the cuts come over the hump. The control of the retarders will be entirely automatic, calling for no action on the part of the operator under normal conditions. The correct release speed will be calculated by a computer taking into account the rolling resistance of the wagon, distance it has to run in the siding and the curvature of the track, and the correct pressure will be applied to the retarder by means of a servo system which will take into account the required leaving speed and the weight of the wagon. The operator could, however, override any part of the automatic system if this should be necessary. In the case of the points a separate switch will be provided for each set of points; each retarder will have a manual control switch.

## Contractors

Main contractor for signalling system, retarders and automatic control equipment is Metropolitan-Vickers GRS, Limited, and the installation is being carried out under the supervision of Mr. A. W. Woodbridge, Western Region signal engineer. Main contractor for civil engineering work is Sir Robert McAlpine and Sons (South Wales), Limited, which is dealing with earthwork, permanent way, bridgeworks, drainage and fencing, and John Morgan (Builders), Limited, which is building the control tower. This work is being carried out under the supervision of Mr. M. G. R. Smith, chief civil engineer, Western Region.

Following negotiations between Government delegations of the Netherlands and the Soviet Union, K.L.M. (Royal Dutch Airlines) will inaugurate a weekly service between Amsterdam and Moscow on July 21. Representatives of Aeroflot and K.L.M. have reached full agreement concerning co-operation on the new route. Both will operate weekly between Amsterdam and Moscow throughout this summer and coming winter, and the intention is to raise the frequency to two flights weekly as from 1959 summer schedules. K.L.M. fly via Warsaw with Douglas DC6B, while Aeroflot will fly direct with Tupolev 104A aircraft.



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## REORGANISED BOILER SHOP

### Progressive Flow at Crewe Works

SOME reorganisation has recently been carried out in the boiler shop at Crewe Locomotive Works of London Midland Region, British Railways, covering the plating and welding sections, which are concerned with the preparation and fabrication of sub-assemblies for locomotive construction and the welding of fabricated components generally. The aim throughout the reorganisation has been towards a progressive flow of work, the improvement of working conditions and prevention of accidents, the provision of improved accommodation for tools and small stores and improved facilities for handling and storage of gas cylinders.

#### Clearly Defined Gangways

In the rearrangement, the gangways of the shop have been clearly defined by means of white lines painted on the floor in combination with fabricated steel markers. This ensures that clear passage is maintained for both pedestrian and motor traffic and facilitates movements about the shop. The fabricated markers are simple structures manufactured in welded steel plate and suitably painted. A unit-type welding compound has been adopted which, while achieving a robust construction and

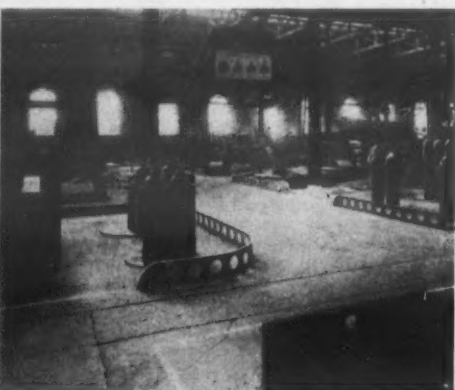
position. To prevent their receiving shocks during unloading and handling, special damping mats have been provided.

At ten strategic points throughout the shop, a long-handled gas-cylinder key has been provided and clearly labelled. Thus, in the event of any emergency involving the necessity to close a gas cylinder cock from a distance greater than that afforded by the normal key, a suitable tool is available and readily visible.

#### Special Trucks

Each permanent working position in the shop is provided with its own stand for cylinders, thus avoiding the risk of cylinders being accidentally knocked over. For temporary working positions and for the general transport of cylinders around the shop, special trucks fitted with shock-absorbing springs have been provided, and these enable the cylinders to be located safely in the upright position without being subject to shock or to the risk of being knocked over.

In order to economise in floor space whilst providing adequate storage for individual workmen's tools and so on, four-compartment tool boxes have been provided to replace the single boxes



Clear gangways and progressive work flow are features of the reorganised boiler shop at Crewe Locomotive Works; here are seen the layout for fabricating diesel-electric shunting locomotive components and, right, the gas-cylinder station with its special stands and clear cautionary notices

permanent appearance, can be dismantled and re-erected without difficulty should re-siting be necessary at any time. The components, tubular stanchions and sheet-metal walls, are bolted together so that the components can equally well be used for the erection of draught screens or other general partitions.

The internal surfaces of the compounds are painted in a matt finish in order to obtain a low degree of light reflection and so minimise the effect of the glare of the welding arc. Provision is made inside each compound for the display of working drawings so that these can be consulted readily during fabrication. The drawing is held at a convenient height by means of spring clips attached to one of the wall panels.

#### Progressive Flow of Work

The flow of work has been arranged on progressive lines, and a typical example is given in the left-hand picture in our illustration, which shows the layout for the production of fabricated sub-assemblies for diesel-electric shunting locomotives. All assembly fixtures and similar special equipment have been painted in maroon to make them readily distinguishable and each station is further identified by a name-board which is attached to an adjacent crane stanchion and which indicates the particular component being dealt with in that area.

Because of the increase in the variety of gases used in production processes, special attention has been paid to the identification, storage and handling of gas cylinders, so obtaining the best form of handling and control with a maximum degree of safety, and a gas-cylinder station has been set up in a convenient position in the shop. The station is divided into two sections, embracing full and empty cylinders respectively, and each section is further divided between fuel and non-fuel gases. Suspended in a central position over the station is a large notice board reproducing the three major precautions which are necessary in the handling of gas cylinders and a panel showing the standard colour code which is used to identify the content of cylinders.

#### Gas-Cylinder Stands

The design of the stands for the accommodation of both full and empty cylinders provides for secure holding of the cylinders in the vertical position in such a manner that they are readily identifiable and have their taps in the most accessible

previously used. General-user tools and small consumable stores are now dispensed from a central store, which also embraces a reclamation depot in which nuts and bolts and other reclaimable items are reconditioned and made available for further use.

Opportunity has been taken to instal a first-aid station, which has proved of considerable value in the prompt treatment of minor injuries. Emphasis has however been placed wherever possible upon the need for accident prevention. Due regard has been paid to the joint consultation procedure in effecting this reorganisation and the improvements have been carried out with the full co-operation of the staff concerned.

## CAPE ASBESTOS RESULTS

### Healthy Increase in 1957

NET profit before tax of the Cape Asbestos group of companies for the year ended December 31, 1957, amounted to £1,421,021 compared with £1,154,595 for 1956, states the group's Annual Report and Accounts published on May 20. This is the highest in the 64 years of the company's history. The Cape Asbestos group comprises the world's largest producers of Amosite and Blue asbestos, obtained from their South African mines, and are the manufacturers of the well-known Caposite range of thermal insulation materials, Asbestolux asbestos insulation board, Capasco brake and clutch linings and a diversified range of other products.

In his statement, the chairman, Mr. Giles Newton, pointed out that since the end of 1954, when £1,564,000 new capital was subscribed, some £2,875,000 had been invested in capital additions, £1,251,000 in 1957. The group turnover during the year yielded a healthy increase over 1956. While the volume of export of manufactured goods remained at about the same level as in 1956, exports of crude asbestos from South Africa to the United States of America and Canada increased appreciably. The year 1957 had been one of steady improvement at the South African asbestos mines and developed ore reserves at all the main centres had been substantially increased. Exploration of new deposits was being actively pursued.

## London Bus Strike

### SETTLEMENT PROPOSALS

THE proposals of June 19 upon which the seven-week London Transport bus strike was eventually brought to an end were as follows:

1. Central Road Services drivers and conductors to receive an increase of 8s. 6d. per week with effect from the date of resumption of work.

2. Green Line single-deck coach drivers to receive an agreed increase with effect from the date of resumption of work.

3. A joint review of the wages of the excluded staffs to be carried out on the merits of the case. This review to start on the day before the resumption of work and to be completed not later than July 1. Any increase agreed as a result of this review to be payable on and from July 2.

In an endeavour to remove any misunderstandings concerning the intentions of the review and to assist in securing an agreed and orderly resumption of duty, the London Transport Executive and the union agree that the intention of the review will be to provide an upward trend in wage levels.

In so far as the maintenance staffs are concerned, any increase arising from the review will not be less than an adjustment in wages which may be granted to London Transport Executive works staff and rail-

way workshops staff arising from the present negotiations. This is in line with normal practice.

In so far as the Country Services staff are concerned, it is not the intention that any decision arising from the review shall leave the wages of such staff in an unfavourable position compared with other staffs inside the London Transport Executive road services or comparable grades elsewhere.

4. Neither staff whose labour has been withdrawn nor staff who have reported for duty during the period of withdrawal of labour shall be prejudiced either by the Executive or by the union by their actions during this period. The Executive and the union to undertake to use their best endeavours to ensure that this agreement is observed in the spirit as well as in the letter.

5. It is agreed that the schedules posted for operation on April 30, May 14 and June 25 will continue to remain as the basis of operation on resumption of work. Having regard, however, to the present financial position of London Transport and to meet the needs of the public and the staff, London Transport Executive and Transport and General Workers' Union agree jointly to examine the whole operation of the bus services, with a view to the necessary adjustments being made to provide a service commensurate with public demand.

Editorial comment on page 1.



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## SMITHFIELD STRIKE INQUIRY

### Causes Investigated

AT the conclusion of the inquiry held by the committee of investigation at Church House, Westminster, on Monday this week into the causes and circumstances of the nine-week unofficial strike by members of the T. and G.W.U. employed by the Wholesale Meat and Provisions Transport Association at Smithfield Market in London, Mr. F. Eastwood, secretary of the road haulage group of the union, was asked by the chairman, Professor D. T. Jack, what in his view were the principal causes of the stoppage. Mr. Eastwood replied that the principal contributory factor was the delay in using the negotiating machinery, the Joint Industrial Council for London Meat Carriers. He also accused the employers of "looking over their shoulders"—a reference to the wider wage claim now before the N.J.I.C. for the Road Haulage Industry in respect of the 30 m.p.h. speed limit for heavy goods vehicles. He did not think there were any weaknesses in the negotiating machinery. Answering the same question, Mr. H. F. Minter, chairman of the W.M.P.T.A. (which nominates members to the employers' panel of the meat J.I.C.) blamed the delay on failure of the union to consult in full its membership, hastened by the action of unofficial elements outside the sphere of official negotiations. He pointed out that it was open to either side to convene a meeting of the J.I.C. at any time.

Mr. Eastwood had opened his submission by explaining that an application to the J.I.C. for a 15 per cent increase on basic rates was made in June last year. It was based on an agreement which he said was reached with British Road Services dealing with the consequential effect of increasing the legal speed limit. It was suggested to the meat trade employers that the claim should be dealt with on an overall basis, as other matters were affected. After various meetings the employers indicated on April 10 this year that they were not prepared to accede to the application. The stoppage commenced on April 19-20.

#### Benefits of Higher Speed

Expected advantages of the higher speed were: faster running times; improvement in tractor operation; compensation in respect of long book-offs; subsistence allowances saved; greater availability of vehicles. He said also that B.R.S., which was to apply a 15 per cent increase over all its fleet, owned over 50 per cent of the vehicles chartered to United Carriers, Limited (which controls wholesale transport from Smithfield market and elsewhere).

In his submission, Mr. Minter (who is vice-chairman on the employers' side of the J.I.C.) said that those affected by the change in the speed limit formed a very small proportion of the whole—about 200 of the 1,700 workers covered by the negotiations. Moreover, of those 200, about 80 were employed on local distribution work, where a change in the speed limit could have little, if any, practical effect. Had the claim been confined to the men actually affected, there was no reason to doubt that it could have been quickly settled by negotiation.

The employers had always been ready to concede that some adjustment in pay, although not an increase of 15 per cent, would be warranted for these men if and when they were asked to take advantage of the higher speed limit. They had not so far been asked to do so. The position arising was a national one and road haulage employers thought it should be dealt with thus. The B.R.S. agreement was quite inappropriate to the London meat carriers and he noted that it had not been implemented after the passage of one year (the B.R.S. agreement in principle was announced in June, 1957). The workers' side had made reference to what was called the "11-hour complex (whether or not a vehicle was driven over that period)" and wanted the working day reduced to 10 hours.

#### Plus Payments

The London meat workers already enjoyed wages on average 12 per cent above those of B.R.S. drivers. Meat drivers received, first, an additional 8s. per week as the result of arbitration; those on retail work received 8s. plus 27s., tractor drivers received a plus payment of 21s.-27s. over the statutory rates. There were restrictions on starting times and on night work; drivers did not pull back their loads as was commonly the custom elsewhere in haulage; an experimental sick-pay scheme had been introduced. The employers had agreed to an investigation of drivers' work sheets for March in order to assess possible savings from 30 m.p.h. running, but before that could be arranged the strike intervened.

The chairman questioned Mr. Eastwood on the constitution of the J.I.C.: would he not agree that it was mandatory that when negotiations could not be resolved they should be referred to the Minister for the Industrial Court? Mr. Eastwood agreed but added that the workers' side felt that the negotiating machinery had not been exhausted. He admitted that members had not been specifically asked whether they wished the dispute to be referred to the Minister of Labour for him to make a reference to the Industrial Court. The union, he submitted, had taken every opportunity to end

the unofficial stoppage. Subsequently Mr. K. H. Jackson, road transport officer of the union, admitted that he drew attention at a meeting to the J.I.C. constitution clause relating to compulsory arbitration in certain circumstances—"I drew their attention to that, but reference to arbitration was flatly rejected." The chairman: Rejected in the full knowledge that their action was contrary to the constitution of the J.I.C.?—It was, sir.

In further answers to the chairman, Mr. Eastwood said that there was no complete document setting out the basis of wages and conditions issued under the auspices of the J.I.C., although the union issued an unofficial booklet. The two parties relied on the minutes of J.I.C. meetings and upon Road Haulage Wages Orders for general conditions. To this, Mr. Minter, questioned by the chairman, said that the employers would object to what they feared would be the extraction of clauses from the Road Haulage Wages Order and their simplification in the way the union wanted. The employers, he told the chairman, were prepared to have the dispute go to arbitration, but the strike had intervened.

#### B.R.S. Agreement and Meat Hauliers

B.R.S. had expressed willingness to negotiate on the general 30 m.p.h. issue, said Mr. Eastwood, but the R.H.A., representing independent hauliers, had said there could be no common approach by both sides of the industry, and the T. and G.W.U. had therefore continued its negotiations with B.R.S. alone, resulting in the 1957 agreement. He agreed that the present claim might have wider repercussions in other quarters. Replying to more questions, Mr. Minter explained that the B.R.S. principles could not be applied in the meat J.I.C. because the percentage of the meat fleet affected was very much smaller; in B.R.S. possibly 60-70 per cent of the vehicles could benefit. Then, too, the London meat carriers bore several plus payments which the B.R.S. agreement was designed to replace.

#### No Union Concessions

Speaking about the proceedings of a joint sub-committee of the J.I.C., which was set up to study all aspects of the wage claim, Mr. E. J. Booth, for the employers, stated that it came out that some vehicles had not been effectively employed for the whole period for which wages were paid. It was clear after discussions that the union was not prepared to make any concessions on starting times or any other matter of consequence. It was not very helpful and offered no countervailing suggestions that would have justified the employers making an offer on their part.

Mr. Minter questioned whether as many as 30 carriers had agreed to pay any award in order to retain their labour during the strike (this was a claim by Mr. Eastwood), but in any event few or none of them were represented on the J.I.C. and they would not be meat carriers in the full sense of the term. He added that the 12 per cent higher wages already paid by J.I.C. members meant that their competitive position was weakened and traffic was diminishing (Mr. Minter did not specify whether he was referring to meat or to general traffic). He promised to put in evidence of the decline. The chairman announced that it might be necessary to call the two parties before him again before he presented his report to the Minister. Sitting with him were Mr. D. K. Rolitt, a member of the council of the British Employers' Confederation, and Mr. W. A. Morrison, general secretary of the National Union of Printing, Book-binding and Paper Workers. Professor Jack is Professor of Economics at the University of Durham.

Bulk drivers at Smithfield returned to work on Monday; in order to bring the market back into operation in an economic manner, retail drivers returned on Tuesday and full working was expected on Wednesday. On Monday it was announced that a committee of inquiry is to be appointed by the Minister of Labour to inquire into the basic causes of troubles at Smithfield Market when the present investigation into the recent unofficial strike has been completed. Its terms of reference will be to inquire whether there are any causes of industrial unrest arising from the present arrangements for the delivery, handling and distribution of meat in Smithfield Market, and to report.

Swissair reports an increase in freight traffic of over 40 per cent for the first four months of 1958 compared with the same period last year, with a total of 5,961,806 tonne-kilometres performed from January to April. A considerable part of the increase was due to the heavy demand for freight space on the Far East route. Freight traffic in Europe rose in the first quarter of 1958 by 22 per cent over the same 1957 period; on the North Atlantic it increased by 17 per cent and on the South America route it was more than four times as great as a year previously. In the Near and Middle East traffic the volume of freight did not reach the 1957 level, which was exceptionally high because of the Suez crisis.

## Spencer House in Service

**B.M.M.O. GARAGE AND COACH STATION IN  
CENTRAL BIRMINGHAM**

ALTHOUGH the new coach station of the Birmingham and Midland Motor Omnibus Co., Limited, in Digbeth, Birmingham, is not likely to be completed until the end of July, it was, for the convenience of the public, brought into service on June 20. As a tribute to the outstanding services to the company given by its chairman, Mr. J. Spencer Wills, over the past 12 years, it has pleasingly been named Spencer House. The company acquired the site, plumb in the centre of Birmingham, in 1925 and a garage, with its integral coach station, was opened on January 3, 1929.

Various alterations have been made since then to cope with the expansion of traffic, including a one-time restaurant across the street. Since the

war traffic has again increased phenomenally, the mileage on Midland "Red" coach services operated from Digbeth has increased from 703,000 car-miles in 1946 to 1,494,000 last year and coach passengers have gone up from 168,000 to 375,000 in annual totals. Saturday peak traffic has grown from 350 vehicles with 10,500 passengers to 500 with 16,000 passengers. From 1947, when there were four coach cruises, the number has grown to 22. Obviously the time for comprehensive reconstruction had come and it is this complex task which is nearly finished now. We propose to take an early opportunity to describe and illustrate this fine example of an urban coach station, offices and garage, which typifies the determination of bus operators generally to serve the public.



## SOCIAL AND PERSONAL

### Farewell Dinner to Mr. H. Clay

THE B.R.S. board of management gave a farewell dinner to Mr. Harold Clay on Tuesday last week to mark his pending retirement at the end of the month. The board was supported by the divisional managers and officers of B.R.S. headquarters and of the Commission. The chairman of the board, Major General G. N. Russell, referred to Mr. Clay's long association with transport, both as an officer of the T. and G.W.U. and as an original member of the Road Haulage Executive and subsequently the B.R.S. board of management. He paid tribute to the invaluable service which Mr. Clay had rendered and the sound advice which he had always given to the board. Before Mr. Clay finally severs his connection with B.R.S., it is the intention to make a presentation to him.

In furtherance of the proposals for decentralisation of management within the Western Region of British Railways, the appointment is announced of Mr. W. R. Stevens, M.Inst.T., as divisional traffic manager, Cardiff, with effect from July 1. This is the first of four such appointments to be made. Mr. Stevens will co-ordinate and control all



Mr. W. R. Stevens

commercial and operating functions in the South Wales area under the revised organisation with responsibility to the assistant general manager (traffic), Mr. A. C. B. Pickford. Mr. Stevens was educated at Clifton College and entered the service of the Great Western Railway in the general manager's office in 1919. Subsequently he served in important operating positions at Paddington, Gloucester and Newport, being appointed as divisional superintendent, Newport, in 1946. He was appointed South Wales area officer, located at Cardiff, in 1956. Mr. Stevens is a past chairman of the South Wales and Monmouthshire section of the Institute of Transport.

Mr. S. J. B. Skyrme has been appointed to succeed Mr. C. W. Wroth as general manager of the Potteries Motor Traction Co., Limited, on the latter's retirement on November 1 next. Mr. Skyrme commenced his training in the engineering department of the former Belfast Omnibus Co., Limited, in 1929, subsequently joining the engineering department of United Automobile Services, Limited, in 1931. He held a number of appointments, becoming area engineer in the county of Durham. In 1949 he was appointed chief engineer to East Midland Motor Services, Limited, until June 1952, when he took up the position of chief engineer with North Western Road Car Co., Limited. Since 1954 he has been general manager of East Midland Motor Services.



Mr. S. J. B. Skyrme

A memorial service to the late Mr. W. J. Everard, managing director of F. T. Everard and Sons, Limited, will be held at Allhallowes Berkyngchirche by the Tower on Tuesday, July 1, at 12 noon.

We record with regret the death of Mr. W. J. Bridge, a former vice-chairman of Lancashire County Council County Highways and Bridges Committee and also formerly a deputy Traffic Commissioner for the North Western Area. He was 80.

Mr. H. M. Alderson Smith, LL.M., has been appointed chairman of Lancashire United Transport, Limited, and Sir Robert A. Cary, Bart., M.P., deputy chairman to fill vacancies caused by the death of Sir Joseph Nall, the former chairman.

We record with regret the death of Mr. A. K. Hollisher, formerly general transport manager of Boots Pure Drug Co., Limited, Nottingham. Mr. Hollisher, who was 61, was appointed general transport manager in 1946 after holding the position of traffic manager. He retired last year.

Arising from the retirement of Mr. H. Carter, M.C., A.M.I.C.E., M.I.Struct.E., new works engineer, the following London Transport appointments have now been announced:

Mr. A. C. Edrich, A.M.I.C.E., to be civil engineer (maintenance).  
Mr. H. G. Follenfant, O.B.E., T.D., B.Sc.(Eng.), M.I.C.E., A.M.Inst.T., to be new works engineer.  
Mr. L. E. Hawkins, M.B.E., B.Sc., A.C.G.I., M.I.C.E., M.I.Struct.E., to be civil engineer (general).  
Mr. H. Chanter has been made an officer of the Executive, retaining the title of permanent way engineer.

At a ceremony at Bowater House, London, last week, Mr. Stanley Bell, a director of the Bowater Paper Corporation, Limited, presented Bowater drivers with medals and bars to medals on behalf of the Royal Society for Prevention of Accidents, supplemented by cash awards from the Corporation. In four million miles of Bowater driving in Britain during 1957, 196 drivers qualified in the 1957 Ro.S.P.A. competition. This represents an 8 per cent achievement in terms of those eligible for the 1957 competition, and is very considerably higher than the national average. One Northfleet driver is the holder of a 17-year accident-free record and there are London and Sittingbourne drivers each with 11-year records.

Small and Parkes, Limited, announces that Mr. Eric Loram has been appointed general sales manager with effect from June 23.

We record with regret the death of Mr. A. C. Fabyean Windeatt, a solicitor practising in the Western area traffic courts.

Mr. William J. Wallace has been appointed director of the international division of the Railway Express Agency, reporting directly to the president.

Mr. D. W. Brisbane, chairman of B.P. Refinery (Kwinana), Limited, was awarded the C.B.E. in the Birthday Honours List for public services in Australia. Also awarded the C.B.E. was Mr. A. W. G. Trantor, for public services in Aden, where he has been general manager of the B.P. Aden refinery since 1954. The M.B.E. went to Mr. A. L. Bannister, training manager of Kuwait Oil Co., Limited. These awards were notified in the Commonwealth of Australia List and the Colonial Office List.

Sir William Currie, C.B.E., chairman of the Peninsular and Oriental Steam Navigation Company, on Tuesday received one of the two 1958 awards made by *The Accountant* for the most informative set of accounts issued in 1957. The presentation was made by Sir John Braithwaite, chairman of the council of the Stock Exchange. *The Accountant* instituted the awards in 1954. They are both of equal rank. One is for large companies, and the other for smaller companies requiring less complex accounts than those of a large group.

We regret to record the death of Mr. H. Dymond, former service manager of A.C.V. Sales, Limited. His career began in 1908 when he was first employed at the Cricklewood works of the former London General Omnibus Co., Limited. From 1914 until 1919 he served with the Motor Transport Division of the Army Service Corps, and saw service in Egypt, Salonika and France. He subsequently became principal demonstrator for the sales department of the Associated Equipment Co., Limited, then chief chassis inspector. In 1938, he was appointed service manager, a position he held up to his retirement in 1955.

Lord Dynevor has accepted the invitation of the Minister of Transport to be the first chairman of the Milford Haven Conservancy Board. Consultations are now in progress about the other appointments to the board. Lord Dynevor is deputy chairman of Sun Insurance Office and Sun Life Assurance. He is also a director of Richard Thomas and Baldwins, Limited. Ezzo Petroleum Co., Limited, also announced last week that the decision has now been made to proceed with building the refinery and marine installation at its site near Milford Haven and work on the site will start immediately. The estimated cost of construction is £18 million. The new refinery is planned initially to process 4.5 million tons of crude oil per annum.

Mr. Allan C. Cooper, general sales manager of I.T.D., Limited, has recently been elected president of the British Industrial Truck Association. He has also been appointed to the British national committee of the Fédération Européenne de la Manutention, an organisation devoted to the creation and maintenance of common standards of practice in the engineering industries with particular reference to handling techniques. He joined I.T.D. in 1947, developed its projects and planning branch, and produced the prototype for the first Stacatrac EH unit. Following the absorption of I.T.D. by Austin Crompton Parkinson Electric Vehicles, Limited, he was appointed U.K. division manager, and after having organised this division was given the franchise to investigate technical selling in various overseas markets. Eighteen months after accepting this appointment he was made general sales manager of I.T.D., Limited. He is a founder member of the British Industrial Truck Association and a council member of the Institute of Materials Handling.



Mr. A. C. Cooper

At a special function in Manchester earlier this month, Mr. W. E. Macve, divisional manager, North Western Division, British Road Services, presented 13 employees of B.R.S. (Parcels), Limited, in the North Western Area, with gold watches in recognition of long service with the



Mr. W. E. Macve (centre) with Mr. H. Jordan (left) and Miss E. Wigley (right), two recipients at the B.R.S. Manchester presentation (see paragraph)

parcels company and its predecessors. The total service of these employees is 630 years. Six were from Manchester, five from Liverpool and two from Preston. Of the 13 recipients, 11 started their transport life with Sutton and Co., Limited. One, Mr. Clarke, has a parcels agency at his home at Oldham which has been carried on for the past 38 years. The employee with the longest service was Mr. R. Wilson (57 years' service), who started with Joseph Nall and Co., Limited. He was closely followed by Mr. J. L. Rice (56 years' service).

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## IMPORTANT CONTRACTS

### More Locomotives for Ghana

**S**UCCESSFUL operation of 14 diesel-electric locomotives supplied to Ghana in 1955 has led to a repeat order for 12 similar machines being placed by Ghana Railways with the English Electric Co., Limited. The locomotives are 750-h.p. Bo-Bo type for operation in shunting and light mixed-traffic services and in multiple unit on heavier main-line services. Weighing 53 tons in working order, they are powered by English Electric six-cylinder SKRT diesel engines. The 12 now ordered will be built at the Darlington works of Robert Stephenson and Hawthorns, Limited, a member company of the English Electric group.

#### B.R. Electrification Order

The British Transport Commission has ordered from Tungstone Products, Limited, Market Harborough, 182 lead-acid batteries—88 of 55 cells and 94 of 24 cells—and the appropriate charging equipments. The batteries are for switchgear operation and supervisory control circuits for electrification programmes in the London Midland, Eastern and Scottish regions.

#### South African Railways Orders

South African Railways has ordered 332 all-metal coaches, with a total value of about £2,000,000, from Commonwealth Engineering Company, Sydney, to be built in the Union at a new works now under construction for Commonwealth Engineering at Nigel, in the Transvaal.

#### Smiths Autopilot for Noratlas

After 21 hours of rigorous flight testing, the Smiths SEP2 autopilot has been accepted as the standard automatic pilot for the Nord Noratlas 2501 military transport and a substantial order has been placed with Smiths Aircraft Instruments, Limited, for aircraft being built for the German Air Force by Flugzeugbau Nord G.m.b.H.

#### Spanish Operator Buys Leylands

Transportes Ochoa S.A., a large Madrid transport company, has placed an order worth over £90,000 with Leyland Motors, Limited, for 26 Super Hippo tractors. They will be equipped with 163-b.h.p. O680 engines and 36-in. fifth-wheel couplings for hauling van-bodied refrigerated semi-trailers for meat transport.

#### Sweden Buys British Radar

Decca radar is to be supplied for equipping the new air terminal at Stockholm and the airport at Gothenburg with up-to-date long-range air surveillance facilities. This substantial contract placed by the Swedish Board of Civil Aviation has been gained by Decca Radar, Limited, in open international competitive tender. This new British radar equipment has been developed specially to meet modern requirements for long-range radar cover at civil air terminals and employs advanced techniques hitherto only available in complex military equipment.

#### U.S. Licence for British Technique

Originally developed by Standard Telecommunication Laboratories, a new technique for the production of hyperpure silicon has been employed commercially by Standard Telephones and

Cables, Limited, for some time, resulting in very high-grade metal rectifier products. The International Telephone and Telegraph Corporation, with whom S.T.C. is associated, has just signed a licence agreement with the Du Pont Company for the latter to manufacture and sell pure silicon in the U.S.A. and Canada using the new British production method, which enables the purest silicon yet discovered to be produced.

#### Scottish Region Contracts

The following contracts have been placed by the Scottish Region of British Railways:

P. and W. Anderson (Glasgow), Limited, for new diesel repair shop and diesel fuelling facilities at Grangemouth motive power depot.

The Clayton Crane and Hoist Co., Limited, Liverpool, for nine 1-ton electric hoist blocks at Motherwell long rail welding installation.

The Westinghouse Brake and Signal Co., Limited, London, for automatic train control, Edinburgh Waverley to Glasgow Queen Street.

Metropolitan-Vickers-GRS, Limited, London, for installation of electric colour-light signalling, Bowling to Helensburgh and Balloch, for Glasgow suburban electrification.

#### New Catering Vehicles for British Railways

Orders have been placed by the British Transport Commission with three firms for 100 new catering vehicles as part of the railway modernisation programme. The vehicles include 38 restaurant-buffet, 27 kitchen-buffet, 23 restaurant and 12 kitchen cars and will be introduced into service during next year. The orders have gone to Charles Roberts and Co., Limited, Wakefield, for 12 kitchen cars for use in the London Midland Region; Cravens, Limited, Sheffield, 9, for 27 kitchen-buffet cars for use in the Eastern and North Eastern (15) and London Midland regions (12); and the Birmingham Railway Carriage and Wagon Co., Limited, Smethwick, for 19 unclassified restaurant cars for use in the Eastern and North Eastern (15) and Scottish regions (4), four first-class restaurant cars for use in the London Midland Region and 38 restaurant-buffet cars for use in the Eastern (2), London Midland (13), Scottish (6), Southern (9) and Western regions (8).

## TENDERS INVITED

**T**HE following items are extracted from the Board of Trade Special Register Service of Information. Inquiries should be addressed, quoting reference number where given, to the Export Services Branch, Board of Trade, Lacon House, Theobalds Road, London, W.C.1.

July 4—Greece.—Institute of Social Insurance for 15 ambulances (one stretcher, two seats) with high ground clearance for occasional off-road use. Tenders to the Office of the Supply Department, Greek Government Social Insurance Head Office, 19, Ippokratous Str., Athens. (ESB/14247/58.)

July 4—Union of South Africa.—South African Railways for one single-deck two-compartment bus (13 European, seven non-European) with separate doors. Tenders, endorsed "Tender No. 7299: Passenger Vehicle," to the Chairman of the Tender Board, P.O. Box 7784, Johannesburg. (ESB/14488/58.)

July 7—Pakistan.—Department of Supply and Development for 25 3-ton (about 138-in. wheelbase) lorries and 25 3-ton (about 138-in. wheelbase) lorries, all petrol engine. Tenders to the Deputy Director-General of Supply and Development, Chittagong. (ESB/14762/58.)

July 7—Sudan.—Sudan Railways for 26 35-ft. long WAGON UNDERFRAMES. Tenders to the Controller of Stores, Sudan Railways, Khartoum.

July 8—Pakistan.—Ministry of Communications for 495,000 broad-gauge (9 ft. by 10 in. by 5 in.) hardwood or semi-hardwood sleepers. Tenders to the Joint Director, Civil Engineering, Railway Division, Room No. 311, 2nd Floor, Pakistan Secretariat Building, Karachi. (ESB/13293/58.)

Export Opportunity—Vietnam.—Cogema, 406 Rue Trinh Minh The, Saigon, wishes to obtain quotations from United Kingdom manufacturers of vertical diesel engines of between 2-40 h.p. (ESB/14883/58.)

## SHIPPING and SHIPBUILDING

### New Tyne Dry Dock

**A** LARGE dry dock is to be constructed by Vickers-Armstrongs (Shipbuilders), Limited, near its existing dry dock at the Palmers Hebburn shiprepairing works on the Tyne. The dimensions of the new dock will be 850 ft. by 145 ft. at entrance by 35 ft. over sill and it will accommodate oil tankers of up to 80,000 deadweight tons. Location, design and construction are arranged so that extensions can later be made lengthening the dock up to 1,000 ft., thus catering for the projected still larger tankers up to 120,000 deadweight tons. The new dock in its first stage is planned to be open and ready for use by 1961. It will be the largest on the east side of Britain.

### Colombo Takeover Put Off

**T**HE takeover of cargo handling operations in the port of Colombo from private hands, fixed for July 1, has been put off owing to the present emergency conditions in the country, it is officially announced. The revised date on which the Colombo Port Cargo Corporation will now assume control of port operations will be announced in due course.

### Pametrada Report

**T**HE progress report for 1957 of the Pametrada research station at Wallsend states that the application of gas turbines to marine propulsion was considered and a technical committee was instructed to prepare a design of radial inward-flow reversible gas turbine, suitable for use with free-piston gasifiers, with a view to the design being manufactured and tested with the Pametrada 3,500-s.h.p. gas-turbine plant.

### B.P. Launchings in Italy

**F**IRST of six ships ordered in 1955 and being built in Italy for B.P. Tanker Co., Limited, was to be launched by Lady Clarke, wife of the British Ambassador to Italy, on June 21. The 35,000 deadweight-ton vessel, which is being built by Cantieri Riuniti dell'Adriatico, at Trieste, will be named *British Star*. The tanker has an overall length of 683 ft. and a breadth of 86 ft. Her single screw, driven by steam turbines will give her a loaded service speed of 15½ knots. The crew accommodation is air-conditioned.

### American Banner Lines Ship

**O**N June 18 the American Banner Lines ship the *Atlantic*, 18,100 tons, arrived in Zeebrugge on her maiden voyage from New York with almost 900 passengers. Her itinerary will be New York—Zeebrugge—Amsterdam. American Banner Lines is a new company, formed to mark the re-entry into the transatlantic passenger trade of Mr. Arnold Bernstein. He took the *Atlantic* over as a Mariner-class cargo ship and converted her to passenger work at a cost of some \$14 million. She is not a big ship, but there is an impression of spaciousness which belies her modest exterior. Her dining-room seats 500 and there are also a bar and café.

## FUEL EFFICIENCY EXHIBITION

### At Olympia in the Autumn

**T**HE 1958 Industrial Fuel Efficiency Exhibition, which is being held at Olympia, London, from September 24 to October 3, is now in active preparation and practically all stand sites have been taken. Advance information from exhibitors indicates that there will be many items of improved plant and equipment on show, ranging through traditional solid-fuel appliances to gas, oil, electric and nuclear power plant, and the latest techniques in automatic control and instruments will be represented. An important series of technical conferences has been arranged by the Institute of Fuel, the programme of which is to be announced shortly.

This is an exhibition which will interest most branches of industry and which should provide many pointers to greater productivity at lower cost. It is organised by Provincial Exhibitions, Limited, City Hall, Deansgate, Manchester, to whom inquiries for stand space or other details should be addressed without delay, and is supported by the Atomic Energy Authority, British Iron and Steel Federation, Combustion Engineering Association and other national bodies.

## FINANCIAL RESULTS

**N**OTES on the trading results, dividends and financial provisions of companies associated with the transport industry are contained in this feature, together with details of share issues, acquisitions and company formations or reorganisations.

### Maidstone and District Motor Services

For the year ended March 31, 1958, Maidstone and District Motor Services, Limited, earned a net profit of £114,102 (£172,491), including, from September 30, 1957, the receipts and expenses of the Hastings Tramways Company, which was transferred to the Maidstone company at that date. Traffic receipts and other revenue totalled £2,999,138 (£3,118,440).

### Ribble Motor Services

Ribble Motor Services, Limited, shows a group net profit of £145,029 (£214,410) for the year ended March 31, 1958, wherein traffic receipts and other revenue were £5,022,660 (£5,160,780). The drop in revenue was principally due to the nine-day strike in July, 1957; increased fares were authorised from November 1 last year.

### Rolls-Royce

To meet problems posed by the changing pattern of the company's business, its worldwide character and the increasing range of activities, Rolls-Royce, Limited, proposes to create local and/or divisional boards, managing or consulting committees, or agencies in the United Kingdom or abroad, and a special resolution to this effect, amending the articles of association, will be put to an extraordinary general meeting following the annual general meeting at Derby on July 15. (Results for 1957 appeared May 24.)

K.L.M. Royal Dutch Airlines plans to inaugurate its twice-weekly Polar service from Amsterdam to Tokyo and Biak on November 1, 1958. Operated with DC7C aircraft, the new route will cut 16 hr. from the present flight time to Tokyo via the Near and Middle East and 1,500 miles from present flight plans. Westbound, the twice-weekly service will definitely call at Anchorage Airport, Alaska, and from paper flights carried out at Schiphol Airport, it has been estimated that one other call will have to be made. Eastbound, owing to prevailing winds, only Anchorage—which has a better weather record than Europe—will be used.

## British Aluminium

## Embossed Sheet

saves

painting costs



(Photograph by courtesy of Dennis Bros. Ltd.)

This ambulance is one of a number constructed by Dennis Bros. Ltd. for Middlesex County Council. Initial and subsequent painting costs have been avoided by using Embossed aluminium exterior panels.

Embossed aluminium has a pleasing appearance, and its patterned surface masks scratches which would show on flat panels.



## The BRITISH ALUMINIUM Co Ltd

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